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GENDER PERSPECTIVES ON THE NATIONAL CLIMATE CHANGE POLICY

Civil Society Coalition for Climate Change (CSCCC)
A Networking Platform for Climate Action



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Civil Society Coalition for Climate Change (CSCCC)

CSCCC provides a networking platform for civil society organizations, climate experts, academia, researchers, media, private sector and concerned citizens to exchange ideas and build synergies while preserving and strengthening the autonomy and independence of its members. The coalition approach was adopted to enhance civil society capacity for effective engagement with policy makers to support mitigation and adaptation actions that build resilience and reduce vulnerability at all levels by integrating adaptation into relevant socio-economic and environmental policies for sustainable development. The concept of the coalition is in line with the Lima-Paris Action Agenda (LPAA) and Paris Agreement on Climate Change which recognizes civil society as a key player in framing climate policies to strengthen climate governance. The strategic focus of the coalition also covers Agenda 2030 for Sustainable Development particularly SDG13 (Climate Action). CSCCC works with "A Whole of Government Approach" and follows the guidelines of "Open Government Partnership (OGP)" to achieve its objectives.

The Civil Society Civil Society Coalition for Climate Change (CSCCC) is a licensed Coalition (registered under Section 42 of the Companies Ordinance, 1984) dedicated to highlighting the subject of climate change in Pakistan and influencing policymaking at the regional, national and subnational levels through research, knowledge-sharing, and advocacy.

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LIST OF ACRONYMS

CEDAW	Convention on the Elimination of all Forms of Discrimination against Women
COP	Conference of Parties
DDR	Disaster Risk Reduction
GAP	Gender Action Plan
GDP	Gross Domestic Product
NCCP	National Climate Change Policy
NDMA	National Disaster Management Authority
NRM	Natural Resource Management
PML-N	Pakistan Muslim League-Nawaz
PTI	Pakistan Tehreek-e-Insaaf
SDGs	Sustainable Development Goals
TNA	Technology Needs Assessment
UNFCCC	United Nations Framework Convention on Climate Change
WPG	Work Program on Gender

GLOSSARY

Adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
Climate change	A change in the world's climate, persisting for an extended period of time. Climate change occurs as a result of natural conditions or anthropogenic sources changing the composition of the atmosphere or the land use type.
COP	The COP is the supreme decision-making body of the Convention on Climate Change, which currently meets once a year to review the Convention's progress
Mitigation	A human intervention to reduce the sources or enhance the sinks of greenhouse gases.
Gender	Gender refers to the socially constructed characteristics of women and men
Vulnerability	The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes

FOREWORD BY CHAIRPERSON NCSW

The link between women and the environment was officially acknowledged for the first time in Pakistan during the development of Pakistan's National Conservation Strategy that was adopted in 1992. It was the same year that Agenda 21 as part of the UN Conference on Environment and Development (UNCED) at Rio was also committed to by the states of the world. It underscored women's close nexus with the environment, their significant role in natural resource management and 21 pointed to the fact that changes in the environment had a direct bearing on women often increasing their vulnerability. Hence the inclusion of their perspective was imperative in decision making, capacity building, and environmental conservation. While several civil society organisations were formed around that time with a focus on the environment, sustainable development and women and the environment, the gender dimension remained peripheral in policies and programs.

Climate change, with irreversible dimensions, has ushered in the grave situation whereby the causes are often located beyond local control. A fact exemplified by the case of Pakistan, a very low-level contributor to climate change, is one of the ten most threatened countries due to it. Effects of climate change are most evident in the form of natural disasters --- floods, droughts, landslides, glacial melt, shifting weather patterns – and need adaptation as well as mitigation strategies for long term impact. Successive governments have paid due attention to the issue, beginning with its examination and implications for Pakistan by experts in 2008, leading to the formation of a *Task Force on Climate Change* in 2010. The Task Force developed the *National Climate Change Policy* in 2012, followed by the *Framework of Implementation of Climate Change Policy* adopted in 2014. Pakistan has ratified the 2015 Paris Agreement (COP21) and submitted its Intended Nationally Determined Contribution (INDC). The most recent Conference of Parties (COP23) in Bonn made gendered mainstreaming mandatory in climate policies.

In NCSW's view the majority of Pakistani women live in rural areas. They are integral to Pakistan's agricultural production (including livestock), are closest to natural resources as collectors and managers of fuel, fodder, and domestic water, but remain invisible. Women's voices are not heard; with changes brought on by climate vagaries they find themselves ill-equipped to deal with the new challenges. Their conventional knowledge is inadequate; the dire need is for adaptation strategies for women that are specific to their geographic locations and circumstances. The Commission has for some time felt the need for a review of Pakistan's Climate Change Policy and the Implementation Framework.

NCSW therefore warmly welcomed Civil Society Coalition for Climate Change's (CSCCC) suggestion to team up for a review of the climate change policy and implementation framework in the context of the Paris Agreement, Pakistan's INDC combined with the SDGs especially SDG 17, and use the opportunity to give recommendations for compliance with the decision of COP 23 (gender mainstreaming at all levels). The excellent Review carried out by CGaPS documents and analyses Pakistan's climate change policies and institutions from the gender perspective identifying gaps in them, and very importantly includes a Gender Action Plan adapted from the COP23 Gender Action framework as it may be applied in Pakistan.

I would like to extend my special acknowledgements to Ms. Aisha Khan, Chief Executive of CSCCC for taking the initiative for teaming up with NCSW and Ms. Anam Zeb of CSCCC for coordinating the effort. My gratitude and appreciation for Dr. Yasmin Zaidi and her team especially Salman Zaidi for the excellent research and an incisive report with a doable action framework. I look forward to the Report enriching and contributing substantially to a holistic discourse, policy making and action plan for meeting the challenges of climate change in Pakistan.

Khawar Mumtaz
Chairperson NCSW
January 2019

INTRODUCTION

Pakistan is ranked at 7 of the 10 countries most affected by climate change globally (Global Climate Risk Index 2017), its vulnerability enhanced by its dependence on agriculture, mediated by demographic trends, geography and weak government measures to adapt to climate change.¹ Recognition of the adverse impacts of climate change on women does not translate fully into policies or strategies aimed at climate adaptation and mitigation, or enhancing climate resilience. A clear understanding of the gendered dimensions of climate change, and women's differentiated vulnerability to climate risks must take into account socially structured gender inequalities that limit women's access and control over productive resources, decision-making and planning processes.

Climate change affects people differently based on their age, region, sex, gender norms and socio-economic backgrounds. The National Policy on Climate Change in Pakistan (NCCP) recognizes the vulnerability of women, elderly and disabled persons (particularly in evacuation strategies) and that of rural women in agriculture. This emphasis is not misplaced since women constitute 49% of the rural population engaged in agriculture and livestock sectors, where the frequency of extreme events over recent years has had a debilitating impact on productivity, livelihoods and food security.² In addition, climate shocks have triggered migration (especially male outmigration) which increases women's vulnerability to violence, increased workload,³ loss of financial autonomy, poor health and reduced decision-making or negotiating power.⁴

Incorporating a gender dimension in climate change is relatively new across the world; at the forums of United Nations Framework Convention on Climate Change (UNFCCC) member states are hard pressed to demonstrate gender responsive approaches in climate policy and action. The nexus between climate change, food security and women's poverty was first recognized at the Rio Summit in 1992, and thereafter highlighted by the UNFCCC's Conference of Parties' (COP) sessions numerous times. More recently, the 2015 Paris Agreement (COP21) reiterated the Rio Summit's focus on women's inclusion in climate policy, and the Gender Action Plan (COP23) makes it mandatory to revise climate policy with gendered mainstreaming at all levels.

This study reviews the National Climate Change Policy (NCCP) from a gender lens, framing it within the context of women's work and lives in Pakistan, and national and international policy instruments the Government of Pakistan is a party to, particularly the Paris Agreement and the subsequent Gender Action Plan. It attempts to shed light on the differentiated impacts of climate change on women keeping in view their status and role in Natural Resource Management (NRM) and particularly the ways in which the NCCP and its Implementation Framework can cater more substantively to women's vulnerability induced by climate change, and generate gender responsive policy and implementation approaches.

¹Asian Development Bank., 2017. Climate Change Profile of Pakistan. Manila

²United Nations Development Programme ., 2013. *Overview of Linkages between Gender and Climate Change*. New York: UNDP.

³International Development Research Centre., 2015. Climate change, Vulnerability, food security and human health in Rural Pakistan: A gender perspective.

⁴Ajani, EA Onwubuya and RN Mgbenka., 2013. Approaches to Economic Empowerment of Rural Women For Climate Change Mitigation And Adaptation: Implications For Policy

Chapter 1 National Climate Change Policy and Human Development

The Planning Commission of Pakistan held a series of expert consultations from 2008-2010 with the intention of preparing a comprehensive policy framework for climate action, recognizing that climate change was transforming into a “multi-dimensional development issue”. This effort materialized in the form of a report prepared by the Task Force on Climate Change (2010) and became the foundation document of the *National Climate Change Policy* (NCCP) presented two years later (2012).

This period also coincided with the mega floods of 2010 and 2011 that transformed the national narrative on disaster preparedness and the losses experienced through environmental degradation. The prolonged disaster rehabilitation period following the floods revealed major deficits in national and provincial capacities to cope with natural calamities, and the broad scale of deprivation in human, developmental, socio-economic and environmental terms.

The NCCP was followed a year later by the *Framework of Implementation of Climate Change Policy* (2013), and like the NCCP, placed its focus on adaptation responses, given the frequency and impact of extreme events in Pakistan. Both documents indicate the need for incorporating lessons learned from interventions in Pakistan and elsewhere that enable “integrated climate compatible development processes” to further evolve policy framework over time with better evidence.

These documents collectively provide a conceptual and practical parameter for climate action and incorporate several policy recommendations from global literature.⁵ Adaptation is sometimes integrated with Disaster Risk Reduction (DRR) as well as with socio-economic considerations, including poverty alleviation and gender inclusion, in a wish list of necessary interventions. However, the NCCP is squarely rooted in the technical-administrative⁶ tradition of climate policy writing: its core provisions are based on technical aspects of adaptation (such as infrastructural improvements, increased mechanization or new research techniques) and administrative elements that resource their achievement (including integrated management, capacity building and awareness-raising).

Far less attention is devoted to a people-centric governance of climate change, wherein developmental issues and specifically human rights and gender considerations are given their due share. This is predicated on the understanding that adaptation is about enhancing the quality of human lives while simultaneously reducing vulnerabilities and protecting ecosystems. The NCCP is cognizant of the impact of climate change on vulnerable communities, but it has not been authored from a human rights perspective that can sufficiently integrate human development indicators with environmental ones.

Climate policy frameworks must establish human development indicators alongside climate competencies for a number of reasons. For far too long, climate change remained an abstract science explained in terms of supranormal environmental conditions developing in “broad open spaces,” and therefore not within the purview of local policy action.⁷ It is now abundantly clear that climate impact is more localized than imagined and has affected everything from drinking water to livelihoods. Secondly, climate discourse is still dense with scientific jargon that makes it inaccessible for stakeholders striving to forestall its impact. The scientific lexicon need not be done away with, but remedial climate action must be described in developmental terms as its implementers may be less conversant in climate science than human development. Lastly, unless climate degradation is intelligible in terms of its impact on people, its core debate will remain relegated to the sidelines of national political agendas.

⁵Global economy and development.,2009. Climate Change Policy: Recommendations to reach consensus.

⁶Rodenberg, B.,2009. Climate Change Adaptation from a Gender Perspective: A cross-cutting analysis of development-policy instruments.

⁷Rodenberg, B.,2009. Climate Change Adaptation from a Gender Perspective: A cross-cutting analysis of development-policy instruments.

The UN does well by reminding decision-makers that national climate frameworks must place human development at the heart of their policy prescriptions. As evidence from around the world suggests, failure to evolve out of technical-administrative approaches towards climate change can bring about greater economic and social disparity; in some cases, indigenous people have experienced high vulnerability due to carbon reduction programs; staple crops have been cleared out for biofuel production; infrastructure megaprojects have brought about large-scale evictions and displacement of communities.⁸ This is especially pertinent as Pakistan makes a case for large scale environmental infrastructure over the next decades.

To this end, the NCCP and Framework of Implementation make good reference to the Millennium Development Goals and the importance of incorporating human development with climate action. But this interlinkage is unclear in the numerous interventions. For example, how can water conservation strategies make clean drinking water more accessible for communities that need them most? Does increased crop productivity bring about food security for poor farmers who produce them? How do aggressive reforestation drives plan to benefit forest communities and the larger populace? The outcomes of the suggested interventions are not explicitly stated, nor referenced against best practices, although their intention is presumably development-oriented. Furthermore, the target groups or beneficiaries who stand to benefit from the interventions must be identified, as the outcomes of these interventions will affect people differently.

The National Climate Change Policy aims to mainstream the gender perspective into climate change efforts at national and regional level, reduce vulnerabilities of rural women in terms of water, energy and food, and develop vulnerability reduction measures for climate change by focusing on women needs and including their local knowledge in climate change adaptation measures. However, the proposed adaptation and mitigation strategies have not accounted for the peculiar vulnerabilities stemming from women's socio-economic conditions in Pakistan. Nor is women's role in Natural Resource Management (NRM) sufficiently reflected in the Implementation Framework developed in 2014. Gender is treated as an 'add on' rather than integral part of climate policy and implementation mechanisms, and requires mainstreaming from the outset.

The NCCP acknowledges the differentiated impact of climate change felt across gender, age and socio-economic divides, which should be reflected in the Framework through more targeted breakdown of interventions by demographic group. Furthermore, the non-financial 'adjustment costs' of making transitions in adaptation and mitigation must be spelled out to develop a more realistic distinction between 'doables' and 'desirables' from the policy menu.

The Sustainable Development Goals' (SDGs) list of indicators has been adopted by the federal and provincial governments in Pakistan, as well as the Federal Ministry of Climate Change. The SDG indicators have been linked to the NCCP's climate interventions in practice, if not reflected in the NCCP document, which predates the SDGs. Goal 13 of the SDGs address climate action, whereas multiple other goals can help track progress made in other sectors through interlinking the interventions of the NCCP and Framework with SDG outcome indicators. If the climate policy is redrafted or an addendum issued, it must connect the SDGs with its policy prescriptions as well as consider alternative indicator lists developed by multilateral agencies and other governments.

As some experts maintain, the future of vulnerability hinges as much on the degree of climate degradation as the wisdom of development pathways undertaken by national planners, which can significantly enhance resilience on ground.⁹ The climate change policy framework must go a step ahead and focus on adaptation measures that assist and enable poverty alleviation as well. The case for enhancing resilience and reducing vulnerability is strongest when it protects poor communities from the worst excesses of climate degradation. It is well known that climate change impacts the poor

⁸<https://www.ohchr.org/Documents/Issues/Development/OpenLetterHC.pdf>

⁹International Federation of Red Cross.,2009. Climate Change Adaptation Strategies for Local Impact

disproportionately, resulting in traps related to income, education, health, social networks and other resources.¹⁰ With about a quarter of Pakistan's population living below the poverty line,¹¹ the climate induced strains experienced through loss of home and land, declining livelihoods, nutritional deficiency and disease have been well documented. The occurrence of extreme events is all the more challenging for poor households and communities, and it comes as little surprise that six months after intensive rehabilitation efforts following the 2010 flood in Pakistan, rural households reported absolute poverty as they could not recover their income earning potential, in some cases permanently.¹²

The NCCP has one page on gender and climate change, recognizing women's vulnerability and also their potential role in adaptation. While NCCP intended to mainstream gender in national and regional climate change initiatives, and 'develop gender sensitive indicators and criteria related to adaptation and vulnerability, as gender differences in this area are most crucial and most visible'. Regrettably the implementation framework does not build on this promise and women are absent from the suggested strategies for adaptation and mitigation.

NCCP and the Paris Agreement

The Paris Agreement has been a game changer for climate action all over the world, as well as Pakistan, where it has made climate governance a central feature of social policy. Despite environment being a provincial subject of governance in Pakistan, two federal governments have successively given climate change its rightful attention through political, legislative and institutional support in collaboration with multilateral aid agencies and NGOs.

The lead-up to the Paris Agreement at COP21 in 2015 triggered a climate policy overhaul in Pakistan. The newly upgraded Federal Ministry of Climate Change produced Pakistan's Intended Nationally Determined Contribution (INDC) in 2015 that has since been updated and reflects Pakistan's consistent negotiating position at COP forums. It also brought a national stocktaking of carbon emissions that have grown at 123 percent each year from 1994-2015, and whose mitigation by 20 percent in 2030 will cost a staggering \$40 billion. Pakistan's "forced adaption" needs accrue costs between \$7 billion to \$14 billion per annum.¹³

The core provisions of the Paris Agreement require member states to collectively maintain any increases in average global temperature below the 2°C mark; assist adaptation to climate change, build climate resilience and reduce carbon emissions; and fund climate-resilient development. It also requires member states to build ambitious and transformative national plans whose progress should be reported every five years to the UNFCCC. Following the near-universal ratification of Paris Agreement and its immediate coming into force, the subsequent UN climate change conferences in Marrakech (COP22, 2016) and Bonn (COP23, 2017) focused on the modalities of operationalizing the Paris Agreement by 2020. Moreover, gender was incorporated in the decisions taken by the UNFCCC.

¹⁰World Bank.,2014. Climate Change and Poverty.

¹¹Pakistan Economic Survey 2017-18. http://www.finance.gov.pk/survey_1718.html

¹²Kirsch, T.D. et al., 2012. Impact of the 2010 Pakistan Floods on Rural and Urban Populations at Six Months. Available at: 10.1371/4fdb212d2432.

¹³Pakistan Economic Survey 2017-18. Chapter on Climate Change http://www.finance.gov.pk/survey/chapters_18/16-Climate_change.pdf

Time line: Gender Integration in Decisions Taken Under UNFCCC

YEAR	GENDER INTEGRATION
2001	COP7 adopts the first standalone decision on enhancement of gender balance and women's participation. It integrates gender equality as a guiding principle for national adaptation program of action.
2010	COP16 adopts the Cancun Agreements where decisions on adaptation, REDD+ and capacity building include references to gender. The 'Shared Vision' outlines gender equality as important for all aspects of climate action.
2011	COP17 adopts decisions on finance and technology that include gender considerations, mainly concerned with Green Climate Fund and the CTCN.
2012	COP18 adopts decision on enhancing gender balance under the Convention, and makes gender a standing agenda item of the COP.
2013	COP19 adopts the Warsaw International Mechanism (WIM) including a mandate for collection of gender disaggregated data.
2014	COP20 adopts a two-year 'Lima Work Program on Gender' to further enhance gender balance but also to provide knowledge and capacity building on gender-responsive climate policy.
2015	COP21 adopts the Paris Agreement, which includes gender equality in the preamble, as well as references in adaptation and capacity building.
2016	COP22 adopts a three-year extension of the Lima Work Program on Gender.
2017	COP23 is mandated to develop a two-year gender action plan.

Source: Pocket Guide to Gender Equality Under the UNFCCC.¹⁴

Meanwhile, considerable progress was made in Pakistan after the Paris Agreement. The Ministry of Climate Change initiated a Technology Needs Assessment (TNA) in collaboration with international partners as required by UNFCCC to identify barriers that prevent adaptation and mitigation, published as the *Barrier Analysis and Enabling Framework* (2016). The *National Adaptation Plan* outlining medium- and long-term objectives and strategies is in the process of being drafted.¹⁵

Pakistan's parliament passed the *Climate Change Act* (2017) which mandates the Climate Change Council and Climate Change Authority to formulate, guide, monitor and report on the implementation of climate change policy and international commitments. The SDGs were adopted as Pakistan's own *National Sustainable Development Strategy* in 2016 through a parliamentary resolution, followed by inter-ministerial coordination between the federal and provincial agencies to replace MDG targets with that of the SDGs.¹⁶

The *National Forest Policy* (2015) saw effective implementation with the Green Pakistan Program (commenced 2017) aiming for an initial target of planting 100 million trees. Subsequently, the *10 Billion Tree Tsunami* undertaken by the new government has marked a far more ambitious target.

Civil society historically assisted policy delivery in climate action. Since 2015, multiple civil society groups have bolstered governmental capacity in creating new legislation, preparing key documents, highlighting implementation challenges, generating research and public discourse on climate change, and mainstreaming particular agenda points from the COP discussions in the pre-2020 period. The UNFCCC provisions after the Paris Agreement call for extensive participation by civil society groups to help achieve commonly articulated goals for climate change.

¹⁴European Capacity Building Initiative.,2017. Pocket Guide to Gender Equality Under the UNFCCC.

¹⁵Civil Society Coalition for Climate Change., 2017. Framing Pakistan's Agenda for COP23:

Policy Recommendations from Consultative Workshops.

¹⁶Ilyas,F.,2016. National sustainable development strategy discussed. DAWN. Available at: <https://www.dawn.com/news/1298003>

However, there is a lot more ground to cover for Pakistan in meeting the international commitments that have emerged from the UNFCCC agreements. The political intent demonstrated by the PML-N and PTI governments preceding and following the 2015 Paris Agreement has created a much-needed sense of urgency around climate action, but there are deep seated capacity deficits¹⁷ in technical knowledge and institutional support that need to be overcome for Pakistan to start delivering on its promises. Financial constraints contribute to this challenge.

As Pakistan makes a case for substantial funds for Climate Change Adaptation at COP along with the G77+China, there are important questions to be asked about the domestic needs assessments tied to budgeting exercises that underpin the national adaptation and mitigation strategies. There has to be greater transparency in this domain, as donors and civil society organizations have pointed out.¹⁸ The nature of aid absorption and its management at federal and provincial levels involve politically sensitive public discussions that must occur in conjunction with adequate public knowledge of climate issues and their management.

Climate decision makers are simultaneously affectees of climate degradation, and the linkage between climate programming and target setting must be explicitly established in mainstream political discourse to allow synergy and speed in climate action. The servicing of international climate commitments must not remain the preserve of a niche policy elite, rather climate action should have broad participation from stakeholders including, most significantly, businesses and industry from across the country. Climate change after the Paris Agreement provides a national opportunity for multi-sectoral policy coordination, awareness raising, democratic inclusion, as well as a real chance to implement the SDGs. The primary driver of this momentum has to be the national and provincial governments assisted by civil society.

The next chapter discusses the Gender Action Plan of the UNFCCC and how it can be modified for Pakistan.

¹⁷Government of Pakistan.,2016. Technology Needs Assessment for Climate Change Adaptation: Barrier Analysis and Enabling Framework.

¹⁸United Nations Development Programme.,2015. PAKISTAN Climate Public Expenditure and Institutional Review (CPEIR).

CHAPTER 2 GENDER ACTION PLAN- UNFCCC

The UNFCCC has promoted gender inclusion in its policy documents and statements issued over the course of COP meetings, although it did not have a gender focus at its inception. Gender mainstreaming has recently found more effective articulation at COP18 in Doha, where a decision was made regarding improving the gender balance in climate negotiations, and at COP20 in Lima, where the *Work Programme on Gender* (WPG) was introduced to emphasize gender equality mandates through all domains of climate action.

The Paris Agreement that emerged from COP21 is largely gender-neutral in its provisions, but has been appreciated for including gender equality into its preambular clauses that denotes a precondition for member states undertaking climate action. Articles 7 and 11 of the Paris Agreement specifically require member states to adopt gender-responsive approaches in adaptation and capacity building, among a host of other considerations.

COP23 in Bonn came up with a full-fledged *Gender Action Plan* (GAP) evolved from the earlier WPG whose rationale was that gender-sensitive and participatory approaches must be incorporated in adaptation and mitigation, keeping in view the differentiated impacts of climate change experienced by women and children. Thus far, member states have made scant progress toward this end.¹⁹ The GAP additionally asks member states to include women at all levels of the UNFCCC negotiation process, as well as recasting their domestic climate policies and implementation mechanisms to become more gender-responsive. The five areas prioritized by GAP are:

- a) Capacity building, knowledge sharing and communication
- b) Gender balance, participation and women's leadership
- c) Coherence (within UNFCCC bodies)
- d) Gender responsive implementation and means of implementation
- e) Monitoring and reporting

It allows a two-year period for member states to align their national agendas with its provisions, after which country positions will be reviewed by the UNFCCC Secretariat in 2019. The GAP acknowledges that parties to the agreement stand at different stages on a global gender-inclusion spectrum, and some of the priority areas identified in the GAP may require differing timelines and measurement indicators. All the same, it provides a useful programming structure for gender inclusion in both UNFCCC forums and country level institutions and procedures.

The brief window, till UNFCCC prepares a country review, provides stakeholders in Pakistan an opportunity to define a customized, gender responsive framework that demonstrates the intent to implement the GAP, as well as conforming to the spirit of COP discussions in Lima, Bonn and Paris. Commitments to other international instruments, such as CEDAW and the SDGs, are realized through the same set of interventions. Early action will enable Pakistan to assume leadership of the debates at UNFCCC as well as other global climate initiatives.

Implementing the GAP

The GAP should best be seen as a framework that has evolved over rounds of dialogue at UNFCCC. A critique emerging from international advocacy groups holds that the GAP presents an effective milestone in gender mainstreaming, but unless timelines and performance indicators are built into the GAP framework, its applicability remains incomplete. Furthermore, gender justice is not served through the adoption of GAP, rather the results it helps bring about in years to come will mark the extent of its utility.²⁰

¹⁹United Nations Framework Convention on Climate Change.,2016. Gender Action plan. Available at: https://unfccc.int/sites/default/files/cp23_auv_gender.pdf

²⁰Women Engage for a Common Future., 2017. Action Plan ever adopted under UNFCCC.(online). Available at: http://www.wecf.eu/english/press/releases/2017/11/GAP_PressRelease.php

In its current iteration issued at COP23, the GAP framework does suggest further goalposts: introduction of timelines for implementation; indicative resource requirements; and review and monitoring processes that have yet to be defined. These may be addressed in subsequent revisions to the current document. But what it does put forth is a multi-layered institutional and procedural scheme to overhaul negotiation procedures within the UNFCCC system as well as within countries that are a party to its agreements.

Grounding the Gender Action Plan in Pakistan

The five priority areas identified in this scheme allow some degree of interpretation for domestic contexts. This report provides interpretive descriptions for the themes in the information that follows. Presented below is a modified version of the GAP as it may apply to the Federal Government of Pakistan, which is a party to the UNFCCC and whose responsibility it is to carry out the recommended activities of the GAP.

- i. Capacity-building, knowledge sharing and communication
Activities that enhance agency and build creative potential and competencies; establish research data bases and knowledge management systems that broaden access to climate and gender relevant information; education and awareness raising through the creation and dissemination of policy/research products; dialogue and public discourse on gender sensitization in climate action.
- ii. Gender balance, participation and women's leadership
Activities that bring about a discernible difference in women's presence in sub-national, national, and international decision-making bodies and delegations; gender mainstreaming in all climate related spheres in policy, executive and management roles. This also involves measures that make women's representation and participation meaningful, and assist the development of diverse political and technocratic agendas at home and abroad.
- iii. Coherence (within the UNFCCC bodies)
Activities through which Member states enable multi-level roles, capacity building and exposure to interlocution, analysis, supervision, representation, dialogue, management (including agenda setting, policy formulation and budgeting) for women in climate change, and eventually resource international leadership roles in UNFCCC bodies, as well as other multilateral forums.
- iv. Gender responsive implementation and means of implementation
Climate programming to effectively integrate gender considerations through institutional mechanisms, processes and the stakeholder dynamics to bring about gender responsive outcomes and results. This also involves the creation of indicators that assist the achievement of gender mainstreaming, and help course correct pathways to development.
- v. Monitoring and reporting
Activities that help track effective policies, implementation and outcomes through formal and informal results frameworks.

The GAP in Practice in Pakistan is set out in a matrix, with suggested activities and indicators for each of the five areas noted above (Annex 1).

The next section looks at each of the four identified areas for action in the Framework of Implementation and suggests possible ways of making it more gender inclusive and responsive.

²¹European Capacity Building Initiative.,2017. Pocket Guide to Gender Equality Under the UNFCCC.

²²Alam,R.,n.d . Climate Governance after the 18th Amendment. s.n

CHAPTER 3 FACTORING IN GENDER AND VULNERABILITY

The UNFCCC's Gender Action Plan (described in the previous section) provides a comprehensive list of interventions needed to bring about gender responsive policy and implementation. No particular sequence has been identified in undertaking the recommended interventions, and many of them can be actioned simultaneously. In retooling the NCCP to make it more gender responsive, this report submits that some interventions suggested by the GAP must be phased in prior to the revised policy framework, as discussed below. This is followed by a gendered analysis of priority thematic areas identified in the NCCP.

3.1 Enabling Environment for Policy Implementation

i) Mandate Gap Between Institutions

Climate change is a multi-sectoral policy challenge whose implementation responses require an efficient interplay between national and provincial governments, line departments and agencies. Developing coherence between competing institutional mandates and jurisdictions is a challenge anywhere in the world, but it is especially so in Pakistan owing to the disjointed handover of federal statutory responsibilities to provinces after devolution. The cross-over of jurisdictions and a 'mandate gap' has been well documented in policy literature.²³

The policy domains relevant to climate change, including healthcare, trade and industry, policy and planning, environment, water and power are at times governed with dissimilar policy imperatives that must be factored in while creating common agendas for climate action. Policy incoherence has led to well-reported instances of governance breakdown, often at the cost of lives and wellbeing.²⁴ Therefore, stakeholders must address 'grey areas' between institutional mandates that hamper delivery or create miscommunication. This report does not seek to recommend alterations to the institutional architecture in climate governance, rather underscore ways in which existing institutions, policies and decision makers can better incorporate a gender component in climate change at the national and provincial levels.

Treating gender as an add-on in policy spheres has led to exclusion and deprivation among beneficiaries of public goods and services. Institutions (not directly mandated with climate change) working together must be re-sensitized to the impact of climate change on communities, and their most vulnerable segments. Policy implementers, in particular, must demonstrate knowledge of climate change and its differentiated impact on socio-economic groups, especially on women, children and the elderly. Public bodies managing climate change should review their internal mandates before the NCCP is revised and thereafter introduce gender responsive implementation.

ii) Quality of Data Available

It is important to emphasize the glaring information deficit in climate related data. An extensive literature review for this report revealed that climate change is quite poorly documented in Pakistan, despite being acknowledged as a national security issue. Scientific evidence for rapidly worsening environmental and climatic conditions is not available for the most part, and its impact on human lives is all the more difficult to establish using existing statistics. Environmental assessments, agricultural productivity reports and social sector indicators completely miss out on climate induced stress and its effect on human lives. The methodologies deployed by national data collectors record increase or decrease in sector outputs and labour productivity, but do not provide any indicators for how those changes come about, and whether climate change is one of them. Gendered statistics, when available, do not help an understanding of a gendered contribution to the economy and even less about men and women's differentiated agency or needs. Any inference of climate stress impacting lives will have to be deduced through matching social

²³Alam,R.,n.d . Climate Governance after the 18th Amendment. s.n

²⁴

sector indices against environmental conditions in specific geographical locations and time periods. This makes policy action dependent on approximations about climate change. There is a need to plug data gaps on climate induced stress affecting communities at national, provincial district and local levels through creating new quantitative indices that shows men and women's experiences.

This has been successfully done in other social sectors, such as education, through the contribution of civil society coalitions in partnership with governmental institutions. The evidence on climate change needs to be improved through similar public-private initiatives or crowd-sourcing, so that policy frameworks can grasp human need and capacity better, and create targeted interventions for beneficiaries based on gender and other demographic differentials.

iii) Reducing Vulnerability

While devising a sequence to policy implementation, it should be emphasized that reducing vulnerability is the ultimate performance measure and deliverable of a climate policy. Climate policy debate can get 'hijacked' by political agendas or uninformed public discourse – in Pakistan it has been mired in a highly-politicized debate about constructing dams. Pakistan's climate policy should prioritize the improvement in the quality of human life, especially among populations that bear the brunt of extreme weather events and natural calamities. A climate policy must focus on reducing vulnerability where it is most pronounced and intersects with weak state support (via provision of social services) and fewer coping mechanisms. This is most apparent in sectors where large swathes of the rural population depend on primary activities for livelihoods and subsistence, and where climate adaptation needs are the most urgent.

However, vulnerability should not simply be conflated with women's experience of climate change. The very objective of introducing gendered positions in climate change is to eliminate pre-conceived notions of helplessness experienced by climate affectees. Having a sense of differentiated need and coping strength of individuals and groups helps establish their degree of relative vulnerability.

The NCCP identifies the following sectors where adaptation measures should be undertaken; these include Water Resources; Agriculture and Livestock; Human Health; Forestry; Biodiversity; Other Vulnerable Ecosystems (Mountain Areas; Coastal and Marine Ecosystems; Rangelands and Pastures; Arid and Hyper-Arid Areas; and Wetlands); Disaster Preparedness; and Socio-economic measures (Poverty and Gender). Subsequent sections of this report provide gender perspectives for the consideration of stakeholders managing these domains, and for policy inclusions to be made to existing frameworks.

3.2 Priority Sectors for Action

A gender analysis of specific sectors identified as priority areas in the NCCP is presented here, and provides a direction for more nuanced understanding of the intersection with gender and possible approaches to integrate women and the marginalized into planning, adaptation and mitigation for climate change. Four sectors are considered: Agriculture, Water, Disaster Preparedness and Health.

3.2.1 Agriculture

Agriculture, once the backbone of Pakistan's economy, contributing as much as 40% of national GDP, still employs 42% of the national labour force though its contribution to the GDP has halved over the last decade. 52% percent of the rural working population is engaged in this sector, of which 28% or 7.3 million workers are rural women and girls aged between 10 and 64 years.²⁵

Unlike other sectors, agricultural statistics are more readily available, and provide a better picture of labour force participation. Women in agriculture in Pakistan work an average of 34 hours per week in addition to their reproductive and care work.²⁶ Only 19% females are in paid employment and 60% work as unpaid workers on family farms. Their unpaid work as 'contributing family members' is valued (using comparative median wages) at PKR 683 billion, constituting 2.6% of GDP.²⁷

²⁵Government of Pakistan., 2010. Agricultural Census Report Pakistan

²⁶Ibid

Women in rural areas are often 'underpaid, overworked and exploited' and usually confront discriminatory gender norms that bring about an imbalance in the division of labour, lack of livelihood opportunities, low income, lack of control over land, restricted mobility and fewer rights.²⁸ Where women are landowners, they usually operate smaller plots and grow crops that are less remunerative with lower yields. This is explained by their limited access to agricultural productive resources and opportunities like land, financial services, water, rural infrastructure, technology and labour.²⁹

Women are often responsible for three components of food security: food availability (production), food access (distribution), and food utilization. They also undertake a wide range of activities that support agricultural development, such as soil and water conservation, afforestation and crop domestication. They face higher constraints than men in food production during deteriorating climatic conditions, as men leave their farms in search of employment elsewhere, and women remain struggling to feed their families and make ends meet.³⁰

Climate change increases men and women's workloads and intensifies vulnerability through taking away fall back options.³¹ Poverty induced by worsening climatic conditions, and loss of prestige and social worth associated with land, has infamously led to farmer suicides. Climate change is likely to affect productive resources and agriculture production as the duration of crop cycle is truncated, river flows are erratic, land degradation, increased crop evapotranspiration as temperatures rise, and extreme weather conditions become more frequent and common. The Framework for Implementation has addressed agriculture, land use, crop varieties and types, information and support for farmers. However, it remains silent on how women and subsistence farmers, women as livestock managers and poultry will be included when training, seeds, farming methods, and climate change adaptation is promoted. Additionally, there appears to be faith in the corporate sector to provide solutions. In economies like that of Pakistan, where the corporate sector is loosely regulated in practice, such reliance is at best misplaced.

Recommendations for Policy Inclusion

1. Women's strong documented ties with natural resource management makes them partners for enhancing resilience. adaptation measures can include provision of small farms to women and their families (with sole or joint ownership) to grow food crops and vegetables, to reduce seasonal vulnerability and enhance food provisioning and processing roles of women. This also reduces water intensive crops (such as rice or wheat). Conserving water in times of scarcity.
2. Vulnerable communities can be provided with solar water pumps and tanks for water storage to support vegetable farming during dry spells.
3. Solar energy in rural communities, especially if women are trained to manage related simple technologies, can enhance options for livelihoods for the landless and for women who do not farm.
4. Elimination of legal discrimination against women associated with their access and ownership of assets. Improving women's access, ownership, and control over land will potentially contribute towards greater investments in the land and increased productivity and welfare.
5. Integration of gender analysis and gender-sensitive tools (such as assessment, design, monitoring and evaluation) into all areas of adaptation planning, especially for the agriculture sector.

²⁷Zaidi, Y. Farooq, S., 2018. Rural Women Status Report

²⁸Green Climate Fund., 2015. Gender Policy and Action Plan. http://www.gcfund.org/fleadmin/00_customer/documents/MOB201503-9th/10_-_Gender_Policy_and_Action_Plan_20150304_fn.pdf

²⁹Gender CC-Women for Climate Justice., n.d. Agriculture, Gender and Climate Change.(online). Available at: <https://gendercc.net/gender-climate/agriculture.html>

³⁰United Nations Development Programme., 2012. Gender, Climate Change and Food Security.

³¹International Development Research Centre, 2015. Climate change, Vulnerability, food security and human health in Rural Pakistan: A gender perspective.

6. The designing and implementation of the gender aware agricultural extension strategy is essential to ensure that women use and benefit from vital information. Make sure that women benefit from access to agricultural extension services. Few women farmers have meaningful access to extension services.
7. Collect sex-disaggregated data in agriculture and food security, including access to land and land tenure security, finance, extension services and agricultural tools.
8. Developing technologies and environments that address women's specialized needs in agriculture sector.
9. Research is needed for assessing link between climate change and gender, undertaking studies that focus sectors that women are concentrated in: agriculture and livestock, soil conservation, food processing, forestation, water management etc.
10. Ensure that women's voices are heard at all levels of governance and in all policy and decision-making processes.

3.2.2 Water

Limited access to water sources, or deteriorating quality of water has a marked effect on women's reproductive roles. It is most usually women and girls who manage, utilize and provide water in their households and bear the 'triple burden' of providing care for family members (reproductive tasks), contributing to household income-generating activity (productive tasks) and caring and supporting the community. When water systems utilized by households or communities fall into disrepair or dry up, women are compelled to travel longer distances to search for water sources. According to global estimates women in some parts of the world spend an estimated 660 hours per year fetching water;³² a figure that is doubled for some rural districts in Pakistan where women are estimated to spend a staggering 1260 hours a year to fetch water from natural sources.³³ There are obvious opportunity costs in terms of less time for productive tasks, education or training for girls, recreation and rest; as well as a heavy physical burden if multiple trips have to be made daily. Further women fear physical and sexual harassment as they go to fetch water if it is some distance away from their home or community. The highest population densities are in areas that have severe physical water scarcity. It is estimated that 3-6 billion of the world's population will inhabit water-stressed areas by 2050.³⁴ Shortage of water through drought, depleted aquifers, or contamination of water bodies creates food insecurity and disease, which compounds women's difficulty in providing food and caring for the sick. Shortage of water typically results in the discontinuation of hygienic practices that prevent sanitation related diseases. Women themselves are more prone to consuming contaminated or unhygienic water, especially if they are house-bound or made to stay close to the community, unlike men who travel to other places for work. In times of food and water scarcity, women prioritize the nutritional needs of their family before themselves, putting themselves at risk of malnutrition.³⁵

Depletion of forest cover and vegetation in times of water shortage results in loss of supplementary nutrition from the forest, and traditional medicine. In addition, rangelands may become overgrazed and watersheds overused by livestock in times of drought. In times of excess water or flooding, women face a unique set of challenges covered in subsequent sections.

The onset of environmental degradation imposes stark choices on households impacted by climate change. Other than loss of income and livelihood experienced in drought or flooding, women find themselves giving up their meager assets, such as jewelry, for the family's survival. Migration of male family members or the whole household, in search of income and food security, creates challenges of adjustment and reinforces women's and girls' dependence on the family unit for survival.

³²World Bank.,2010. Gender in Water and Sanitation

³³World Bank.,2005. Women and Water Issues of Entitlements, Access and Equity.

³⁴World Health Organization., n.d. Gender, Climate Change and Health

³⁵World Bank.,2005. Women and Water Issues of Entitlements, Access and Equity.

Climate projections suggest a decrease in glacier volume, affecting the regular flow of rivers, increase in glacial lakes, irregular monsoons that trigger floods and drought. The Framework for Implementation has provided strategies to meet the objectives of conserving, managing and improving water resources. While these are gender blind, they hold potential for including women and responding to the diverse needs for water management and water use.

Recommendations for Policy Inclusion

1. Provide women with appropriate techniques and training for improved water conservation. Improve women's access to new technologies, extension services and information. Ensure women's presence and participation in irrigation interventions, as their inclusion in irrigation and water management will ensure that women's needs are met and they also benefit.
2. District level agriculture extension teams that include female extension workers can help women farmers to adopt new low-cost energy and water efficient irrigation and agricultural methods.
3. Ensure that women are involved in the strategy to introduce rainwater harvesting, enabling women and their families to have access to safe drinking water in villages with acute water supply problems. Rainwater conservation by women can have a positive impact on food security. It also saves water and reduces downstream flooding. Water insecure households in rural areas will benefit the most from rainwater harvesting systems.
4. In flood prone areas, small rainwater storage interventions, with asset provision to women in the form of land and training for vegetable cultivation will have multiple effects: improved livelihoods, water conservation, reduction in flooding etc.
5. Separate land rights and water rights: As land rights are bound within traditional, cultural and social practices, which are unequal for men and women in South Asia, the delineation of water and land regimes is important for securing the livelihoods of not only women farmers but also the landless women and men.
6. Integration of gender concerns in urban planning and rural development for natural resources must be based on local contexts and leveraging community-based knowledge and help.
7. Systematic gender analyses should be introduced in Integrated Water Resource Management, in addition to a comprehensive gender audit of the policy environment that examines policies, budgets and resource allocations within which climate change policy is being implemented, if gender is to be considered more than a thematic 'add-on' to policies.
8. In devising adaptation and mitigation strategies that often cause livelihood deprivation and displacement for communities, and particularly in developing large scale water infrastructure, the social and economic costs should be well understood and addressed, with equal compensatory measures for women and men.
9. Role of media is important in not only creating awareness of all aspects of water conservation and use, but also educate on the role of women in management of water resources.

3.2.3 Disaster Preparedness

Few policy sectors have received as much attention in Pakistan as disaster management, owing to the frequency of natural calamities and their huge impact on lives, property and livelihoods. Data maintained by National Disaster Management Authority (NDMA) shows that disaster related damage in Pakistan since the 2005 earthquake, and subsequent floods and droughts, have resulted in more than 79,077 deaths and injuries to over 198,000 persons, while destroying 4.3 million housing units. The 2005 earthquake alone caused 73,338 deaths and 128,309 injuries at a time when Pakistan's disaster management systems were as yet underdeveloped. The 2010 floods caused extensive destruction to crops spread over 5 million kanals, generating a direct loss of US\$ 10056 million. Droughts between 1998

and 2014 collectively affected a population of 4.5 million and killed more than 500,000 cattle.³⁶

Research is still evolving on the gendered experience of disasters, and where it exists the evidence is likely to be qualitative, anecdotal, and often times poorly enumerated. Even so, leading studies on gender and disasters hold that women's vulnerability must not be presumed during natural calamities. Gender dynamics and social constructs determine how women and men are likely to be affected by the disasters.³⁷ Women are likely to be more vulnerable in contexts of severe gender inequalities, for example when women and girls have limited mobility and access to education or healthcare, or have little control over resources and limited decision making. Of course these inequalities are mediated by age and marital status, ethnicity, disability and wealth. In the 2005 earthquake that devastated communities across north Pakistan, women suffered more as they were at home during the morning. Women with disabilities and pregnant women suffered greatly as the aftershocks continued and they were unable to flee, and alter as camps were not equipped to handle deliveries. Fears of abduction and trafficking of girls and boys and young women were raised. The rehabilitation strategies also focused more on men, as did the resettlement policies where men were compensated for damage to property, while women lacked proper documentation and even the required national identity cards.

The triple burden of women comprising their reproductive, productive and community managing roles is exacerbated with degrading climate conditions. However, women's agency as community protectors and their role in disaster situations is often overlooked. Evidence suggests that women are able to utilize their community networks more efficiently for early warning, and their reproductive and caring skills are critical in saving lives during and after disaster events. Casualties during disasters have as much to do with gender roles (of men protecting homes, livestock and property), as women (protecting children, the elderly and possessions) that determine their exposure to casualties, and their ratio of survival after the event. The provincial Baluchistan Disaster Management Authority (PDMA) piloted community-based DRM program that involved women as an integral part of the process.

Recommendations for Policy Inclusion:³⁸

1. Including women in DRR projects does not make them gendered nor create space for gender equality in climate change. To bring about gender responsive policy requires political will at multiple levels with the proactive contribution of many stakeholders. Women's groups must be given their due share in participation and inclusion at all levels for them to articulate their pre- and post-disaster experiences to facilitate gender responsive DRR planning and actions.
2. DRM should also address factors that put women at risk i.e. gender discriminatory practices and existing inequalities if the objective of improving disaster response and reducing risk is to be met. Disaster risk reduction must be seen as a long-term development undertaking to reduce vulnerability and build resilience.
3. Women's capacities, not just their vulnerabilities must be recognized. Assist girls and women in building their resilience to reduce the impact of disaster and climate change on their households and communities.
4. Integration of gender perspectives in disaster management and risk reduction projects is necessary, especially through creating gender/sex disaggregated data, reporting and analysis, as well as monitoring and evaluation of the specific targets and outcomes such projects have for beneficiaries;
5. The reproductive health needs of women and girls must be catered for during disasters;
6. Disaster relief and rehabilitation programs should address violence against women and girls as a priority and build it into each aspect of the intervention.

³⁶From multiple publications of NDMA

³⁷Bradshaw, S. Fordham, M.,2013. Women, Girls and Disasters: A review for DFID

³⁸As suggested in multiple research studies relevant to Pakistan's context

7. International policy frameworks addressing climate change, particularly Goal 13 from the Sustainable Development Goals, must be integrated in national policies within which gender equality should be recognized as a key objective in itself, as well as a means to achieve other goals.
8. Awareness through media for disaster preparedness should be a sustained activity that covers different aspects and women's role as protectors and as vulnerable.

3.2.4 Health

Catastrophic events, such as those triggered by climate change affects women far more than men, especially in contexts where women have a poor socio-economic status. This differential in outcomes has been noted in the number of deaths of women and of men as a result of natural disasters, particularly in developing countries, in contrast with countries that reflect gender parity on critical socio-economic indicators. Gendered vulnerabilities stemming from discriminatory social norms, and not biological distinctions between women and men.³⁹

The extreme events resulting from climate change, such as heat waves, windstorms and cyclones, heavy rains or flooding, and drought, each generate challenges for healthcare. Heatwaves cause more deaths in men due to greater direct exposure, evidenced by 1271 deaths in Karachi's summer heatwave of 2015, of whom the majority were men.⁴⁰ Heatwaves spread malaria which impacts pregnant women in higher numbers, and results in spontaneous abortion, premature deliveries, still births and low birth weight. Likewise, waterborne diseases that spread during floods, or contamination of water sources leads to a variety of health issues for men, women and children.

Indirect effects on health include malnutrition through climate induced food insecurity. Communities that depend on non-timber forests for food, traditional medicine and income have experienced malnutrition as a result of forest depletion. Where "household food hierarchies" deprive women of needed calories, women are increasingly malnourished, even as they are pregnant or breastfeeding. In South Asia almost half the women of reproductive ages are underweight and the majority of pregnant women suffer from iron deficiencies.

Social norms and attitudes inhibit women's access to healthcare facilities as well. In Pakistan women cite a number of reasons that impede their access to health care services, including lack of transport, distance to the health facility, lack of a male relative to accompany them or nobody to care for young children while away. For example, 21% female respondents from rural areas do not receive permission to consult a doctor; 36% cannot afford the doctor's fee; 50% have transport and conveyance issues; 61% do not have a male relative who can accompany them. (PDHS 2012-13)

³⁹Neumayer,E. Plumper,T., 2007. The gendered nature of natural disasters: the impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Annals of the Association of American Geographers*, 97 (3). pp. 551-566

⁴⁰Leadership for Environment and Development., 2016. Karachi heatwave 2015: A Visual Guide

Recommendations for Policy Inclusion:

1. Ensure availability and access to healthcare for both women and men, but especially for women, given their nurturing and caregiving roles.
2. Women's health and economic indicators can be utilized as proxy markers for their resilience against climate change. Communities or districts with poor and other socio-economic indicators can be identified as vulnerable to climate change.
3. Assessments of women's and men's capacities and vulnerabilities are essential to formulating adaptation and mitigation strategies, in spheres of disaster risk reduction, transportation, urban planning, energy, water management, agriculture and especially health. It is critical to develop and utilize sex disaggregated data bases that inform policy formulation, and assist course correction.
4. Gender sensitive information, education, communication strategies and advocacy and training should be incorporated into all health interventions. - required.
5. Violence against women and girls, especially in times of stress and shocks should be acknowledged as a public health issue, to be addressed through policy initiatives across different sectors (health, education, employment etc.).
Equip women to enhance their capacities to look after themselves and their families, able to use available social and other available networks to cope with increasing burden of health.

CONCLUSION

Climate change is as much an economic, and human rights issue as it is an environmental concern. Pakistan's vulnerability towards climate change is enhanced by its dependence on agriculture, geography and weak government measures to adapt to climate change. Recognition of the adverse impacts of climate change on women does not translate fully into policies or strategies aimed at climate adaptation and mitigation, or enhancing climate resilience. In all of these arenas, women are disproportionately affected by the consequences of climate change. It is essential to take into consideration women's experiences from various situations while formulating solutions to address climate change. In Pakistan, better linkages between the international climate change regime and government and civil society efforts to address climate change, is needed.

Moreover, after 18th amendment, there is no formal authority left with Federation to implement international agreements, when the subject matter of such international agreements is in the provincial domain. With the increasing prominence on the act which provincial governments must do in meeting climate resilient development objectives, there is a need for better understanding between national and sub-national government. At present, there is no formal mechanism to manage the implementation of climate-related international agreements between the Federation and the Provinces.

Climate change is a global phenomenon that is manifested in many ways, and requires responses from different groups at different levels. It is essential to gather, organize, and analyze gender-disaggregated data, specifically on how men and women contribute to and are affected by climate change. This type of data needs to be disseminated vigorously. Moreover, attention needs to increase at different levels to recognize and embrace women's voices and perspectives about harms suffered as well as examples of successful efforts related to climate change mitigation and adaptation.

To tackle climate change, following are identified as critical actions:

- Revisit the NCCP and the Framework of Implementation with a gender lens and incorporate strategies that are inclusive and respond to women are key stakeholders in climate change adaptation and mitigation.
- Create, fund, and implement national GAP (Gender Action Plan) that is gender-sensitive, gender-responsive, and create workshops for stakeholders to network and coordinate action around incorporating women in climate change mitigation and adaptation processes.
- Climate change has a strong connection with women as majority of women are engaged in agriculture sector and their agricultural productivity is being affected by climate change, either directly or indirectly. Despite of this inter connectedness, little has been done on the linkages between climate change and gender. This area needs to be explored by the academia and researchers.
- Climate change activities need to be grounded on discussion with women, build and integrate their skills and knowledge, and provide opportunities for improving health, education and livelihoods. Increasing women's participation would result in more environmental and productivity gains.
- Ensure that mitigation and adaptation efforts address sources of gender-based vulnerability, gender inequality and poverty. Policy and programming should recognize the fact that women's empowerment and gender equality is beneficial for family, community well-being and livelihoods and are key factors in promoting the resiliency of economies and communities. Actions and strategies need to be pro-poor and gender-responsive in their design, implementation, monitoring and evaluation.

- Ministry of climate change should work closely with provincial Agricultural departments to incorporate climate change resilient elements in provincial agricultural projects especially in those crops where women majority is involved. Gender mainstreaming, gender sensitization and training should be conducted by governmental representatives for integrating gender in different projects.
- Conduct an in-depth and evidence-based analysis of women's and men's roles in sectors most impacted by climate change, and document their coping strategies.

References

- Alam,R.,n.d . Climate Governance after the 18th Amendment. s.n
- Bradshaw, S. Fordham, M.,2013. Women, Girls And Disasters: A review for DFID
- Civil Society Coalition for Climate Change., 2017. Framing Pakistan's Agenda for COP23: Policy Recommendations from Consultative Workshops.
- Bates,V.D, n.d. The Effects of Air Pollution on Children
- European Capacity Building Initiative.,2017. Pocket Guide to Gender Equality Under the UNFCCC.
- Gender CC-Women for Climate Justice.,n.d. Agriculture, Gender and Climate Change.(online). Available at: <https://gendercc.net/gender-climate/agriculture.html>
- Global economy and development.,2009. Climate Change Policy: Recommendations to reach consensus.
- Government of Pakistan., 2012. National Climate Change Policy.
- Government of Pakistan., 2010.Agricultural Census Report Pakistan
- Government of Pakistan.,2015. Pakistan Social and Living Standard Measurement 2014-2015.
- Government of Pakistan.,2015. Pakistan Labor Force Survey 2014-2015.
- Government of Pakistan.,2016. Technology Needs Assessment for Climate Change Adaptation: Barrier Analysis and Enabling Framework. 2014-2030.
- Government of Pakistan.,2013.
- Pakistan Demographic and Health Survey 2012-2013Government of Pakistan.,2014. Framework for Implementation of Climate Change Policy.
- Green Climate Fund., 2015. Gender Policy and Action Plan.
- International Development Research Centre, 2015. Climate change, Vulnerability, food security and human health in Rural Pakistan: A gender perspective.
- International Federation of Red Cross.,2009. Climate Change Adaptation Strategies for Local Impact
- Ilyas,F.,2016. National sustainable development strategy discussed. DAWN. Available at: <https://www.dawn.com/news/1298003>
- Kirsch, T.D. et al., 2012. Impact of the 2010 Pakistan Floods on Rural and Urban Populations at Six Months. Available at: 10.1371/4fdfb212d2432.
- Pakistan Economic Survey 2017-18. Ministry of Finance Government of Pakistan. Islamabad.
- National Disaster Management Authority., 2017. Annual Report 2017
- Neumayer,E. Plumper,T., 2007. The gendered nature of natural disasters: the impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Annals of the Association of American Geographers*, 97 (3). pp. 551-566
- Rodenberg, B.,2009. Climate Change Adaptation from a Gender Perspective: A cross-cutting analysis of development-policy instruments.
- United Nations Development Programme.,2015. PAKISTAN Climate Public Expenditure and Institutional Review (CPEIR).
- United Nations Development Programme., 2012. Gender, Climate Change and Food Security.
- United Nations Framework Convention on Climate Change.,2016. Gender Action plan. Available at: https://unfccc.int/sites/default/files/cp23_auv_gender.pdf
- Women Engage for a Common Future., 2017. Action Plan ever adopted under UNFCCC(online). Available: http://www.wecf.eu/english/press/releases/2017/11/GAP_PressRelease.php
- World Bank.,2014. Climate Change and Poverty.
- World Bank.,2005. Women and Water Issues of Entitlements, Access and Equity.
- World Bank.,2010. Gender in Water and Sanitation
- World Health Organization., n.d. Gender, Climate Change and Health
- Zaidi,Y. Farooq, S., 2018. Rural Women Status Report.

ANNEX 1 GENDER ACTION PLAN IN PRACTICE

The following table is a modified version of the GAP framework as it may apply to Pakistan.

Table 1 Priority Area A: Capacity building, knowledge sharing and communication	
A.1 Mechanisms to enhance capacity of stakeholders to develop gender responsive policy, programs for climate	
Activities	Performance Indicators (outputs and outcomes)
Capacity building exercises, trainings and workshops with the following target groups: i. Legislators in Senate, National and Provincial assemblies;	<ul style="list-style-type: none"> a. Key legislators reference gender and climate change policy in parliamentary debates and formal proceedings; b. Parliamentary bodies provide gender relevant policy inputs for Pakistan's climate framework; c. Gender and climate related legislation is passed.
ii. Policy implementers (including officials at ministries and line agencies other than MoCC) at federal, provincial and local levels;	<ul style="list-style-type: none"> a. Policies and official working documents reflect development and gender focus; b. Policy implementers demonstrate knowledge of gender mainstreaming in climate change; c. Policy implementers highlight gender related concerns in UNFCCC negotiations; d. Policy implementers from outside social sectors demonstrate knowledge of gender and climate change.
iii. Media-persons;	<ul style="list-style-type: none"> a. Frequency of television shows, news reports, opeds referencing gender and climate change; b. Public discourse reflects an understanding of the differentiated impacts of climate change on vulnerable target groups.
iv. Civil society groups	<ul style="list-style-type: none"> a. Enhanced presence of women in climate action; b. Improved evidence of gender mainstreaming in climate action; c. Climate advocacy develops a stronger emphasis on gender mainstreaming.
A.2 Systematic integration of gender sensitive and participatory education, training, public awareness and access to information	
Activities	Performance Indicators
Data gathering exercises, evidence and research on gender and climate via i. Government funded research institutes ii. Private think tanks iii. Media organizations	<ul style="list-style-type: none"> a. Gendered statistics on vulnerable groups are available b. Data on indigenous practices in adaptation and mitigation is available c. Data on women participating in non-traditional sectors (industry, urban planning, energy and transport) is available

	<ol style="list-style-type: none"> d. Quantitative data showing differentiated impact of climate change on vulnerable groups is available e. Volume of news reportage on gender and climate related issues
Education on climate and gender through academic syllabi	<ol style="list-style-type: none"> a. School curricula incorporate components on gender and climate b. Number of university courses on climate change incorporating gender themes c. Number of doctoral dissertations on climate change incorporating gender themes
Awareness raising among citizens	<ol style="list-style-type: none"> a. Informed public discourse on gender and climate change b. Citizen-led initiatives for adaptation and mitigation c. Climate conscious policies are adopted by businesses and industry
Multi-level policy dialogue among stakeholders and institutions	<ol style="list-style-type: none"> a. Legislators, NGOs, CBOs and citizens highlight climate and gender related concerns in their exchange with public institutions b. Inter-provincial, inter-ministerial and other inter-agency discussion on approaches to mainstream gender in climate action c. Trans-boundary dialogue on natural resources reflects gender related concerns

Table 2 Priority Area B: Gender Balance, participation and women's leadership

B.1 Promote Women's Participation in National Level Negotiations and Decision-Making

<i>Activities</i>	<i>Performance Indicators</i>
<p>Mechanisms (including nominations, appointments, invitations and other ways of mainstreaming) that enhance women's qualitative participation in public decision making bodies and negotiation forums related to climate change, including:</p> <ul style="list-style-type: none"> • National and Provincial Assemblies • Council of Common Interests • Parliamentary Standing Committees on Climate Change • Climate Change Council • UNFCCC delegation 	<ol style="list-style-type: none"> a. Increased numbers and presence of women legislators and leaders in national decision making forums b. Qualitative debate led by women legislators or leaders at these forums c. Number of women in positions of authority in climate change related bodies d. Number of women engaged as interlocutors or representatives at international forums on climate change, including UNFCCC e. Women lawmakers and policy practitioners demonstrate knowledge of climate policy, budgeting, implementation, etc.

<p>Mechanisms that enhance participation and create women's leadership in private sector initiatives on climate change, including among:</p> <ol style="list-style-type: none"> i. Media ii. Business and Industry iii. Civil society organizations 	<ol style="list-style-type: none"> a. Increased numbers and presence of women from media, civil society and industrial backgrounds in national decision making forums b. Increased number of women in prominent media positions discussing policy issues on climate change c. Increased number of prominent women from business and corporate backgrounds lead climate related causes d. Women in media, business and industry demonstrate knowledge of climate policy and discourse e. Women from civil society organizations provide leadership at international, national, and sub-national negotiating and representation forums
B.2 Reporting on the gender composition of respective bodies and forums	
Activities	Performance Indicators
<p>Documentation of women's inclusion within governmental, semi-governmental, statutory bodies and departments related to climate change</p>	<ol style="list-style-type: none"> a. The number of female policy practitioners in climate change is known b. Ministries and departments where women's presence is lacking is known c. Women's inclusion and levels of decision making authority within government bodies becomes known
B.3 Organize and conduct capacity-building training on leadership, negotiation, facilitation and chairing	
Activities	Performance Indicators
<p>Capacity building exercises for the following target groups:</p> <ol style="list-style-type: none"> i. Lawmakers in Senate, National and Provincial Assemblies, local government ii. Policy implementers at federal, provincial and local levels; iii. Media-persons, policy experts and corporate leaders; iv. Civil society organizations 	<ol style="list-style-type: none"> a. Increased numbers of persons (from the target groups) leading climate causes b. Number of persons engaged as interlocutors or representatives at international forums on climate change, including UNFCCC c. Negotiation between government and industry leaders on climate change policy as a result of the capacity building exercises d. Inter-agency coordination on contentious policy issues as a result of the capacity building exercises
B.4 Promote and facilitate education and training on climate change at all levels, targeting women and youth at national and sub-national levels	
Activities	Performance Indicators
<p>Measures that create awareness, build capacity and education among youth, women and other marginalized communities in the following roles:</p>	

i. As students	<ul style="list-style-type: none"> a. Students lead community projects on climate change in areas where vulnerability is high b. Student bodies from vulnerable areas provide policy inputs, research and indigenous solutions to tackle climate change
ii. As labour/primary-sector workers (PSWs)	<ul style="list-style-type: none"> a. women labourers/PSWs demonstrate knowledge and share information about the differentiated impact of climate change on their productive roles b. labourers/PSWs (youth and women) demonstrate an understanding of climate change's impact on their livelihood, productivity and health c. labourers/PSWs (youth and women) are conscious of adaptation and mitigation strategies available
iii. As professionals and decision makers	<ul style="list-style-type: none"> a. Number of CBOs or informal coalitions led by youth and women working to reduce climate induced vulnerability on ground b. Number of CBOs or informal coalitions led by youth and women paying special attention to the differentiated needs of men, women, children, elderly and marginalized groups c. Young citizens enlist support of, engage, and audit government bodies in localized climate action d. Youth and women participate in informed public discourse on climate change through print, electronic and social media e. Public demands made for civic facilities are environmentally conscious

Table 3 Priority Area C: Coherence

C.1 Hold national level dialogue open to all stakeholders to discuss outcomes at UNFCCC, and GAP implementation

<i>Activities</i>	<i>Performance Indicators</i>
<p>Forums to facilitate open exchange and policy review between stakeholders, including:</p> <ul style="list-style-type: none"> i. Government ii. Ministry of Climate Change and line departments iii. Climate Change Council iv. Standing Committees and Caucus on Climate Change v. Other ministries that assist climate action (eg. Planning Commission, Ministry of Population Welfare, etc) 	<ul style="list-style-type: none"> a. Stakeholders demonstrate knowledge of Pakistan's position in UNFCCC forums and GAP requirements b. Stakeholders recommend course of action to fulfill GAP requirements c. Stakeholders incorporate GAP framework into the workings of their own departments d. Stakeholders assist the MoCC in achieving UNFCCC and GAP requirements

vi. UNDP, donors and multilateral aid agencies	
vii. Relevant statutory bodies, including NCSW	
viii. Civil society organizations and individual experts	
C.2 Provide capacity building to Ministries and governmental bodies on how to integrate gender considerations in climate change	
Activities	Performance Indicators
<ul style="list-style-type: none"> i. Training sessions with governmental departments ii. Review of gender components in policy and implementation roadmaps of other departments 	<ul style="list-style-type: none"> a. Beneficiaries demonstrate knowledge of Pakistan's position in UNFCCC forums and GAP requirements b. Beneficiaries recommend course of action to fulfill GAP requirements c. Beneficiaries adopt gender responsive policies into the workings of their own departments d. Beneficiaries assist the MoCC in achieving UNFCCC and GAP requirements e. Beneficiaries formulate success indicators for gender mainstreaming in climate change
C.3 Creating synergy with UN entities to support their implementation of UNFCCC mandate and 2030 Agenda for Sustainable Development	
Activities	Performance Indicators
<ul style="list-style-type: none"> i. Publishing official data and evidence on climate change, as well as crowd sourced data that assists UNFCCC and SDG mandates ii. Coordinating implementation on commonly held objectives 	<p>Quantitative and qualitative evidence is made available to policy practitioners and donors</p> <ul style="list-style-type: none"> a. Governmental departments adopt SDG indicators in their implementation roadmaps b. Policy implementers reference UNFCCC and SDG requirements in their workplans and communications

Table 4 Priority Area D: Gender responsive implementation and means of implementation

D.1 Dialogue on gender responsive budgeting and finance	
Activities	Performance Indicators
<ul style="list-style-type: none"> i. Create forums where relevant government bodies can interface with donors, civil society organizations and media on climate finance and gender responsive budgeting 	<ul style="list-style-type: none"> a. Enhanced capacity of policy implementers to build gender responsive metrics in climate finance b. Provincial climate financing frameworks adequately incorporate gender responsive budgeting c. Media organizations lead inquiry on climate finance d. Civil society organizations assist the creation of new budgeting templates that are gender responsive

D.2 Incorporation of gender in technology needs assessments	
Activities	Performance Indicators
<ul style="list-style-type: none"> i. Review of technology needs assessments from gender lens ii. Incorporating gender needs in technologies required for mitigation and adaptation, and infrastructure development at large 	<ul style="list-style-type: none"> a. Technology needs assessments include components on human development indices and/or gender needs b. Technical feasibilities, procurement and technology transfer mechanisms are cognizant of and reflect gender related concerns c. Water and agriculture sector research studies, in particular, incorporate gender related concerns d. National adaptation and mitigation strategies devise full fledged gender components
D.3 Strengthen capacity of gender mechanisms to integrate gender responsive budgeting in climate finance	
Activities	Performance Indicators
<ul style="list-style-type: none"> i. Promote mechanisms through which donors and civil society actors can assist gender responsive budgeting in climate finance ii. Create gender responsive budgets in government-led climate programming 	<ul style="list-style-type: none"> a. Climate finance documents (including country positions and fund requisitions for adaptation) adequately incorporate gender responsive budgets b. Provincial climate financing frameworks adequately incorporate gender responsive budgeting c. Civil society organizations develop specialized audit capacity in gender responsive budgeting

Table 5 Priority Area E: Monitoring and Reporting

E.1 Provide sex-disaggregated data and gender analysis	
Activities	Performance Indicators
Submit where possible*: <ul style="list-style-type: none"> i. Information on the differentiated impacts of climate change on women and men, local communities and indigenous peoples 	<ul style="list-style-type: none"> a. Stakeholders utilize and cite information made available to them in policy debate, writing, campaigning, policy reviews, etc. b. Key stakeholders demonstrate knowledge and share informed perspectives regarding the differentiated impacts of climate change c. Women and men, local communities and indigenous people are consulted about their peculiar vulnerabilities and capacities in climate change
<ul style="list-style-type: none"> ii. Integration of gender considerations into adaptation, mitigation, capacity building, technology and finance policies, plans and actions 	<ul style="list-style-type: none"> a. Policy frameworks relevant to climate change are reviewed and updated with gender considerations b. Implementation of climate programs becomes more gender responsive through incorporating gender considerations

	<ul style="list-style-type: none"> c. National and provincial budgets and other resource allocations are redesigned in a gender responsive manner
<ul style="list-style-type: none"> iii. Policies and plans for and progress made in enhancing gender balance in national climate change delegations 	<ul style="list-style-type: none"> a. Increased numbers of women representatives and interlocutors in domestic, national and international forums b. Funds made available for mainstreaming women (particularly those from indigenous communities) in delegations and decision making forums c. Women with climate relevant competencies in finance, science and technology, policymaking, research and media are included in decision making bodies and negotiations
E.2 and E.3 Reporting the submissions	
Activities	Performance Indicators
Devise measures to report progress within government, and disseminate information among other stakeholders including UN, donors and civil society	<ul style="list-style-type: none"> a. Stakeholders within and outside government have an understanding of progress made with regard to climate commitments b. Stakeholders grasp implementation challenges, capacity and resource deficits as well as opportunities for achieving climate targets c. Stakeholders acknowledge effective mainstreaming of women in the process and delivery of climate programs, as well as gender responsive policy
E.4 Encourage knowledge exchange activities across federal and provincial governments and ministerial domains to update work related to gender	
Activities	Performance Indicators
Devise mechanisms that allow lessons and best practices to be incorporated by other Ministries and departments; and gender responsive policies to be created outside climate change as well	<ul style="list-style-type: none"> a. Increase in the number of departments adopting gender responsive policy making, and best practices b. Number of success models reported

* This list of activities has been taken from the GAP itself, while activities listed in other tables are suggestions of this report.

