



Climate Change Gender Action Plan of the Government and People of Pakistan





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FOREWORD

Across the world, women are far more vulnerable to the impacts of climate change than men. In Pakistan as well, women disproportionately bear the brunt of climate change impacts, facing greater risks of livelihood insecurity, ill health, poor education outcomes and threats to personal safety, including gender based violence. Gender inequality increases vulnerability, because women are excluded from decision making on issues that directly affect their lives. Social biases and cultural norms deprive women of the opportunity to participate in and contribute to the planning and implementation of climate change responses, while preventing women from acting as the agents of change they can be.

Pakistan has long acknowledged the nexus between gender and the environment, starting with the country's first National Conservation Strategy, adopted in 1992. But while this and subsequent policy and strategy documents have continued to recognise the central role of women while making repeated commitments to gender inclusion and mainstreaming, action on the ground to operationalise these commitments has been slow, at best. Much more needs to be done!

Pakistan's Climate Change Gender Action Plan (ccGAP) is one attempt to rectify this imbalance. It aims to support policy measures and strengthen institutional processes that enhance women's participation in climate decision making and implementation.

Developed by the Ministry of Climate Change (MOCC) and the International Union for Conservation of Nature (IUCN), this ccGAP is the first document of its kind that not only recognises the role of gender in the development of climate solutions but also sets out a series of practical steps to make this a reality.

The consultation process that led to the development of the ccGAP also highlighted the need for multi-stakeholder, cross-sectoral partnerships for collective action. There is great scope for joint initiatives between sectors as well as with donors and other partners. The role of international partners is vitally important to provide technical guidance and financing where required.

As the first Gender Responsive Readiness Grant of the Green Climate Fund (GCF), Pakistan's ccGAP makes gender a national priority and sets the

precedent for an enhanced focus on gender mainstreaming in future GCF projects. The ccGAP will help Pakistan boost its profile internationally while also supporting the development and implementation of gender responsive projects within the country.

The MOCC appreciates the role of IUCN Pakistan in building momentum and engaging key stakeholders in the consultation process, which led to the drafting of the ccGAP. The MOCC would also like to thank the hundreds of professionals, experts and thought leaders at IUCN, without whose vision, enthusiasm, dedication and willingness to work across different disciplines this ccGAP would have been impossible. We would like to express our gratitude to all the authors, researchers, reviewers and editors who worked on the ccGAP to make it as accurate, relevant and implementable as possible.

Today, the MOCC strongly believes that a paradigm shift is needed to bring gender concerns front and centre in the planning and implementation of efforts to tackle climate change impacts, build resilience and develop climate smart adaptation measures. With the launch of the ccGAP, a big step has been taken in the mainstreaming of gender considerations in climate change policy and in implementation frameworks. However, more work is needed to ensure that gender concerns are embedded and integrated in all programmes and policies across sectors.

The MOCC is committed to mainstreaming gender in all its programmes and projects. We are keen to take forward the actions proposed in the ccGAP to mitigate the impacts of climate change on women and other vulnerable groups who are among those most severely affected. This will require a multi-partner approach for participatory and collaborative actions. MOCC takes pride in leading this process towards the achievement of global commitments, including the Sustainable Development Goals (SDGs) and Pakistan's Nationally Determined Contributions (NDCs). It is an important step on a long journey to building inclusion.

Senator Sherry Rehman

Federal Minister for Climate Change
Government of Pakistan

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Pakistan's Climate Change Gender Action Plan (ccGAP) was made possible through the collaborative effort of a wide range of contributors, thought leaders, visionaries and agents of innovative change both within Pakistan and internationally.

The ccGAP is a joint initiative of the Ministry of Climate Change (MOCC) and IUCN Pakistan, involving input from sectoral ministries, gender and climate change experts, and various organisations and international partners. Financial support for the project was provided by the Green Climate Fund (GCF), as GCF's first Gender Responsive Readiness Grant, administered by the United Nations Office for Project Services (UNOPS).

The greatest share of the credit goes to the participants of various consultations and workshops that were held during the development of the ccGAP. This includes the national women's workshop, the multi-stakeholder workshop, sector-specific technical sessions, validation sessions, focus group discussions and bilateral meetings with experts. Many volunteers also contributed to this process. All their efforts are deeply appreciated.

Acknowledgement is also owed to our IUCN colleagues across the world, including team members at IUCN's Global Programme on Human Rights in Conservation at HQ, the Gender Expert at the IUCN Asia Regional Office, and members of the IUCN Pakistan team. Senior climate change experts and gender experts in Pakistan also made an invaluable contribution.

Finally, we would like to acknowledge the continued support of the MOCC at the highest level. Besides participating in consultations and providing substantive input, senior members of the MOCC also helped to review, guide and steer the ccGAP development process.

The ccGAP marks a new phase in the work of the MOCC, serving as a charter of commitment to ensure gender inclusion and responsiveness in all policies and programmes, and acknowledging the critical linkages between advancing gender equality and combatting the climate crisis. It is our hope that the implementation of the ccGAP, through the collaboration of cross-sectoral stakeholders, will strengthen gender inclusiveness across all planning and actions for climate change adaptation in Pakistan. IUCN takes great pride in being given the opportunity to support this effort.

Mahmood Akhtar Cheema

Country Representative, IUCN Pakistan

ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AEDB	Alternative Energy Development Board
AJK	Azad Jammu and Kashmir
AKDN	Aga Khan Development Network
AKRSP	Aga Khan Rural Support Programme
APP	Associated Press of Pakistan
BISP	Benazir Income Support Programme
BRSP	Balochistan Rural Support Programme
CBO	community based organisation
ccGAP	Climate Change Gender Action Plan
CNIC	computerised national identity card
CO ₂	carbon dioxide
CSO	civil society organisation
DDMA	District Disaster Management Authority
DRR	disaster risk reduction
EIA	environmental impact assessment
ERRA	Earthquake Reconstruction and Rehabilitation Authority
FAO	Food and Agriculture Organization of the United Nations
FATA	Federally Administered Tribal Areas
GAM	Gender with Age Marker
GB	Gilgit Baltistan
GBV	gender based violence
GCC	Gender and Child Cell
GCCA	Global Gender and Climate Alliance
GCF	Green Climate Fund
GDP	gross domestic product
GEF	Global Environment Facility
GFW	Global Forest Watch

GHG	greenhouse gas
GOP	Government of Pakistan
GWP	Global Water Partnership
HEC	Higher Education Commission
IFAD	International Fund for Agricultural Development
IPC	Integrated Food Security Phase Classification
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
IUCNP	International Union for Conservation of Nature Pakistan
KP	Khyber Pakhtunkhwa
LEAD	Leadership for Environment and Development
LNG	liquefied natural gas
MFF	Mangroves for the Future
MNFS&R	Ministry of National Food Security and Research
MOCC	Ministry of Climate Change
MOPDSI	Ministry of Planning, Development and Special Initiatives
NADRA	National Database and Registration Authority
NCCP	National Climate Change Policy
NCSW	National Commission on the Status of Women
NDCs	Nationally Determined Contributions
NDI	National Democratic Institute
NDMA	National Disaster Management Authority
NDRMF	National Disaster and Risk Management Fund
NGO	non-governmental organisation
NIPS	National Institute of Population Studies
NSER	National Socio-Economic Registry
PAL	Poverty Action Lab
PARC	Pakistan Agricultural Research Council
PASS Division	Poverty Alleviation and Social Safety Division
PBS	Pakistan Bureau of Statistics

PCSW	Provincial Commission on the Status of Women
PDMA	Provincial Disaster Management Authority
PMD	Pakistan Meteorological Department
SDGs	Sustainable Development Goals
STEM	science, technology, engineering and mathematics
SuSanA	Sustainable Sanitation Alliance
TCCR	Trust for Conservation of Coastal Resources
UC	union council
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UN-REDD	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
UNDP	United Nations Development Programme
UNDRR	United Nations Office for Disaster Risk Reduction
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNGA	United Nations General Assembly
UNOPS	United Nations Office for Project Services
US-EPA	United States Environmental Protection Agency
USAID	United States Agency for International Development
USD	United States dollar
WASH	water, sanitation and hygiene
WB	World Bank
WEF	World Economic Forum
WFP	World Food Programme
WHO	World Health Organization
WWF	World Wide Fund for Nature



PART

01

Pakistan's Commitment to Gender Responsive Climate Action

Recognising that climate change affects women and men differently, and that narrowing the gender gap is essential to building climate preparedness and resilience for all



Introduction

Pakistan is among the 15 countries in the world that are most vulnerable to the impacts of climate change (Germanwatch 2021). Extreme weather events have occurred more frequently over the last decade, leading to the loss of life and creating untold human suffering. Climate related disasters such as floods, storms droughts and heatwaves disrupt lives, destroy livelihoods and cause damage to land and property.

The cumulative effects of climate change have a direct impact on the economy, costing the country an estimated USD 38 billion annually (WB and ADB 2021). If this trend continues, human development gains made over the last decade will be reversed. Already, in 2020 Pakistan ranked 154 out of 189 countries on the United Nations Human Development Index, down two places from 152 the previous year (UNDP 2020a).

Gender inequality further impedes economic growth and human development, preventing half of the population from participating in social, political and economic life. Pakistan is one of the most unequal countries in the world for women, ranked at 153 out of 156 countries in 2021 (WEF 2021).

Addressing the threats posed by climate change is a priority for the Government of Pakistan. At the same time, Pakistan recognises that climate change affects women and men differently and that narrowing the gender gap is essential to build climate preparedness and resilience for all. If the country is to tackle the climate challenges that lie ahead, it cannot do so without the full and equal participation of women.

About the ccGAP

This Climate Change Gender Action Plan (ccGAP) demonstrates the Government of Pakistan's commitment to ensure the inclusion and leadership of women in climate action. It is aligned with the priority sectors identified in the National Climate Change Policy (NCCP) of 2021 and is an important step towards achieving a key objective of the NCCP to focus on pro-poor gender sensitive adaptation. (For details on the alignment of the ccGAP with national policies, see Annex 1.)

The ccGAP was developed through a series of consultations with representatives from government ministries and departments, civil society organisations, gender specialists, and subject experts, as well as a diverse group of key stakeholders.

The ccGAP is divided into six sections, each covering a priority sector aligned with the NCCP:

- Disaster risk reduction
- Agriculture and food security
- Forests and biodiversity
- Integrated coastal management
- Water and sanitation
- Energy and transport.

Each section begins with an overview of the sector, focusing on gender related concerns and priorities. Relevant policies and institutional frameworks are examined in brief to determine the extent to which they are gender responsive. A summary is provided of programmes or projects in each sector that focus on women or contain a component related to women. Finally, each section presents a sector-specific action plan to strengthen the inclusion and leadership of women in climate action.

Building a path towards climate resilience

Pakistan has a robust legal and policy framework to support climate action, starting with comprehensive environmental protection laws enacted in the 1990s, backed by implementing rules, regulations and emissions standards (see IUCNP 2003, 2004, 2007a, 2007b, 2008). Pakistan has also developed a number of policies to guide climate action, with its first dedicated Climate Change Policy approved in 2012, which was substantively revised and updated in 2021 (see Annex 2).

Pakistan's climate response is now driven by the National Climate Change Policy (NCCP) of 2021, which acknowledges that human activities are a major contributor to climate change and provides a framework to address climate threats. The NCCP sets a clear goal: "To ensure that climate change is mainstreamed in the economically and socially vulnerable sectors of the economy, and to steer Pakistan towards climate compatible development" (GOP 2021a). This is to be achieved through 14 objectives aimed at building the adaptive capacity of vulnerable populations, including women.



Objectives of the National Climate Change Policy 2021

- Pursue sustained economic growth by addressing the challenges of climate change
- Integrate climate change policy with other national policies
- Focus on pro-poor gender sensitive adaptation, promoting mitigation to the extent possible
- Build climate resilient infrastructure
- Track the impact of climate change on water, food and energy security, and implement remedial plans to support water, energy and food policies
- Minimise risks arising from extreme weather events such as floods, droughts and tropical storms
- Develop climate resilient agriculture and food systems
- Promote the transition to cleaner, lower emission and less carbon intensive development
- Accelerate policy coherence and integration to achieve the UN Sustainable Development Goals (SDGs)
- Strengthen inter-ministerial and inter-provincial decision making and coordination mechanisms on climate change
- Facilitate effective use of opportunities, particularly financial, available both nationally and internationally
- Foster the development of economic incentives for public and private sector investment in adaptation and mitigation measures
- Enhance the awareness, skills and institutional capacity of stakeholders
- Promote tree plantation, conservation of natural resources and nature-based solutions.

Pakistan's vulnerability to climate change threats

- Considerable increase in the frequency and intensity of extreme weather events, coupled with erratic monsoon rains causing frequent and intense floods and droughts
- Projected recession of the Hindukush-Karakoram-Himalayan glaciers due to global warming and carbon deposits from indigenous and transboundary pollution, threatening water inflows into the Indus River System
- Increased siltation of major dams caused by more frequent and intense rains in catchment areas and subsequent floods
- Rising temperatures resulting in extreme heat and water stressed conditions, particularly in arid and semi-arid regions, leading to reduced agricultural productivity
- Increasing air pollution from agriculture, transport and industry resulting in smog causing economic losses and posing a serious hazard to human health
- Further decrease in already thin forest cover from rapid change in climate conditions
- Increased intrusion of saline water in the Indus delta adversely affecting coastal agriculture, mangroves and fish breeding grounds
- Threat to coastal areas as a result of sea level rise and increased cyclone activity due to higher sea surface temperatures
- Increased stress between the upper and lower riparian regions in relation to the sharing of water resources
- Increased health risks and climate change induced migration.

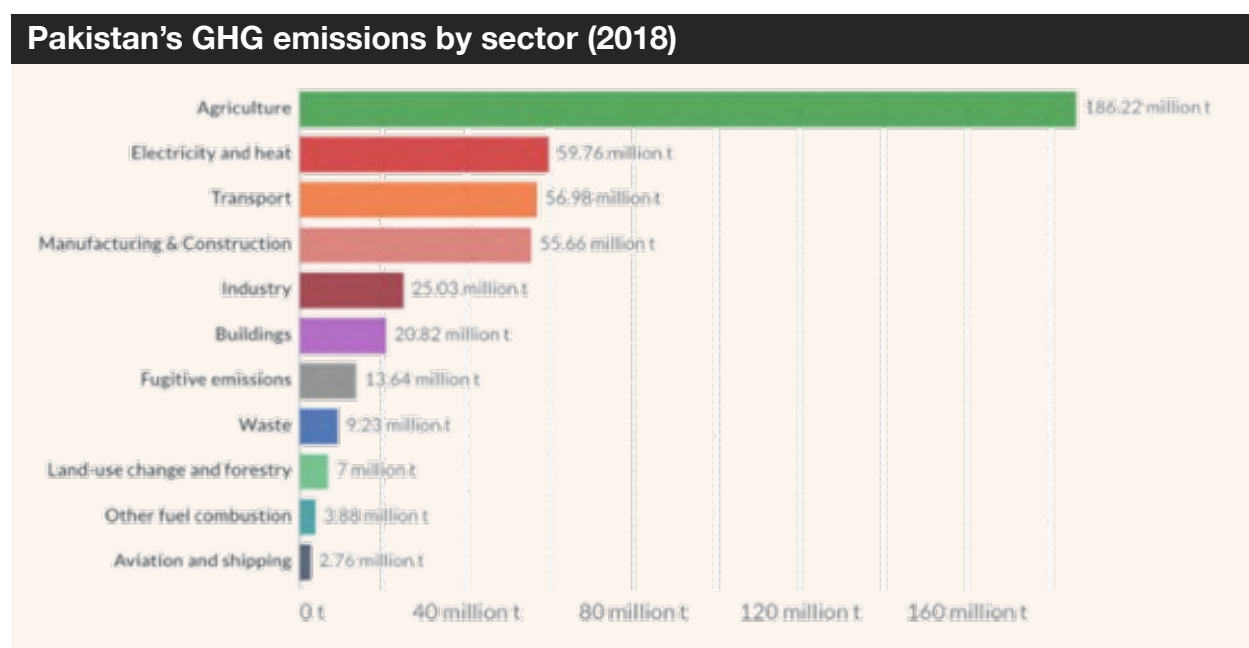
The NCCP acknowledges the growing risk Pakistan faces from extreme weather events and climate related natural disasters, providing a list of critical vulnerabilities. All climate threats identified in the policy have gender differentiated considerations and impacts.

Cutting carbon emissions

Human activities are the main driver of climate change, primarily from the burning of fossil fuels

(IPCC 2014b). Globally, carbon dioxide (CO₂) accounts for the majority of greenhouse gas (GHG) emissions (more than 76%, mainly from fossil fuels), along with methane (16%, mostly from agriculture) and nitrous oxide (6%, from industry and agriculture) (US-EPA 2017).

Although Pakistan is highly vulnerable to the impacts of climate change, its contribution to global carbon emissions is comparatively low, at 0.67% in 2020 (Ritchie et al. 2020). Nevertheless,



(Source: Ritchie et al. 2020)

Pakistan's GHG emissions by sector (percentage of total emissions, 2018)

Sector	Contribution to GHG emissions (%)
Agriculture	42.228
Electricity and heat	13.551
Transport	12.848
Manufacturing and construction	12.621
Industry	5.675
Buildings	4.721
Fugitive emissions	3.093
Waste	2.093
Land use change and forestry	1.587
Other fuel combustion	0.879
Aviation and shipping	0.625

Source: Ritchie et al. 2020

Pakistan's Nationally Determined Contributions

The Updated Nationally Determined Contributions (NDCs) of 2021 reaffirm Pakistan's commitment to cut emissions. The country surpassed earlier planned contributions, reducing emissions by 8.7% between 2016 and 2018. Pakistan's intended conditional and voluntary contributions aim to further lower emissions by 50% by the year 2030, prioritising the following sectors (GOP 2021b):

- Renewable energy: By 2030, 60% of all energy produced in the country to be generated from renewable energy resources including hydropower.
- Transportation: By 2030, 30% of all new vehicles sold in Pakistan to be electric vehicles.
- Coal: From 2020, new coal power plants will be subject to a moratorium and no generation of power through imported coal will be allowed, shelving plans for two new coal fired power plants in favour of hydro.
- Land use and forestry: From 2016 onwards, continued investment in nature-based solutions.

Pakistan's emissions have seen a steady increase over the last two decades, largely as a result of economic growth. As GDP has risen, so have the country's GHG emissions (Ritchie et al. 2020).

Currently the majority of Pakistan's emissions come from the burning of fossil fuels (oil, gas and coal) (Ritchie et al. 2020). By sector, agriculture generates the largest share of GHG emissions (42.2%), followed by energy (13.5%), transport (12.8%), and manufacturing and construction (12.6%) (Ritchie et al. 2020). On the current trajectory of economic growth, Pakistan's emissions are likely to rise sharply in the future.

Tackling the challenge of climate change requires substantial and sustained reductions in GHG emissions, which in turn requires rapid, far reaching and unprecedented changes in all

aspects of human activity, including land use, energy production, industry, buildings, transport and cities (IPCC 2018). What is needed is a new balance between people and the planet, a 'greening' of our economies and societies.

Complementing the NCCP, Pakistan's Updated Nationally Determined Contributions (NDCs), submitted in 2021, set ambitious targets to cut emissions (GOP 2021b). To meet these targets, Pakistan will need to act on multiple fronts, promoting the widespread adoption of renewable energy like solar, wind and small hydro; requiring cities to introduce climate smart transport solutions such as bus rapid transit, electric vehicles and biofuels; retrofitting buildings to make them more energy efficient; and ensuring the sustainable use of water, land and forests.

Ensuring women are included in climate action

The NCCP recognises that climate change affects women and men differently. It notes that women are highly vulnerable to climate change impacts, particularly rural women engaged in the agriculture sector, and that women are also more vulnerable to the effects of extreme weather events and natural disasters. The policy also acknowledges that narrowing the gender gap is essential to building climate preparedness and resilience for all. It highlights the role women can play, noting the critical importance of ensuring the participation of women and gender experts in all policies, initiatives and decisions related to climate action. The NCCP sets out a number of key steps to make this possible:

- Mainstream gender perspectives into climate change efforts at the national and regional levels
- Take steps to reduce the vulnerability of women from climate change impacts, particularly in relation to their critical role in rural areas in water, food, energy and livestock management
- Recognise and value women's contribution in the use and management of natural resources and other activities impacted by climate change
- Undertake a comprehensive study of the gender differentiated impacts of climate change with particular focus on gender differences in the capacity to deploy adaptation measures and strategies
- Develop gender sensitive criteria and indicators related to adaptation and vulnerability, as gender differences in this area are most crucial and most visible
- Develop and implement vulnerability reduction measures that focus on women's needs, and empower women's groups and networks
- Incorporate a role for women in the decision making process on adaptation initiatives

Other policy commitments for gender responsive climate action

Pakistan's Second National Communication on Climate Change to the UNFCCC (2018) notes that "women are likely to be strongly affected by climate change as the majority of rural women are engaged in the agriculture sector, which is highly climate sensitive" (GOP 2018d). It states that climate change will increase the work of agricultural production and other subsistence activities such as fuel wood and water collection, putting extra pressure on women, and that women are more vulnerable during extreme climate events and disasters. It concludes: "Pakistan fully recognises that women are powerful agents of change. It is, therefore, vital to ensure participation of women and female gender experts in all policies, initiatives and decisions relating to climate change. To address the gender aspects of vulnerability from climate change, the government in collaboration with other relevant entities needs to take strategic measures."

The **Framework for Implementation of Climate Change Policy (2014-2030)** recognises that the impacts of climate change could prove particularly severe for women, noting that "the impacts of climate change are not gender neutral" (GOP 2013a). While it states that the government is "determined to support gender integration in various efforts to address climate change", it does not include explicit mention of gender or women in the proposed actions within the framework.

The **National Sustainable Development Strategy (2012)** includes a section on gender equality and women's empowerment, stating that "gender equity remains a fundamental condition for sustainable development" (GOP 2012b). It seeks to increase the role of women and integrate gender considerations into national sustainable development processes, enforce the protection and implementation of women's rights, and empower women through education and awareness raising and by removing discrimination barriers to ensure the inclusion of women in economic development.

- Develop adaptation measures based on local and indigenous knowledge held by women
- Adopt rules making it mandatory for all Ministry of Climate Change (MOCC) projects to take gender considerations into account
- Increase understanding of gender roles and responsibilities by applying a gender analysis to the project and programme planning cycle
- Include gender responsive budgets and resource allocations in all projects and programmes
- Review and amend the relevant national policies to make them gender sensitive
- Include gender and climate change in the school curriculum.

The impact of climate change on women is also acknowledged in the NDCs (GOP 2021b). One of the seven guiding principles defined for NDCs implementation is gender sensitive programming. The NDCs recognise that the lack of economic empowerment prevents Pakistani women from adapting to climate change impacts, noting that it is fundamentally important to identify the specific

needs of women and girls. To this end, the NDCs present a set of gender mainstreaming actions, divided into seven priority areas, along with potential indicators. The priority sectors identified in the NDCs are as follows:

- Agriculture, forestry and other land use change
- Water
- Energy
- Disaster management
- Waste
- Health
- Research and knowledge management.

The NDCs note that Pakistan's Climate Change Gender Action Plan (ccGAP) will serve as a tool to strengthen gender responsive strategies for climate action.

The sector specific action plans set out in this ccGAP are designed to align with the frameworks outlined in the NCCP and the NDCs (see Annex 1).

Pakistan's Climate Change Gender Action Plan

To ensure that national programmes to address climate change are gender responsive, the Ministry of Climate Change (MOCC) engaged the International Union for Conservation of Nature (IUCN), with support from the Green Climate Fund (GCF) to develop a cross-sectoral multistakeholder action plan.

The Pakistan Climate Change Gender Action Plan (ccGAP) is designed to strengthen the implementation of national climate change policies and plans. It seeks to operationalise the commitments set out in the NCCP by ensuring that women are included in all stages of planning, development and implementation.

Pakistan's ccGAP is aligned with the NCCP and builds on the gender mainstreaming actions proposed in the policy. The ccGAP aims to integrate gender and climate in six priority sectors: disaster risk



reduction, agriculture and food security, forests and biodiversity, integrated coastal management, water and sanitation, and energy and transport. It is a tool to build knowledge and capacities, identify gaps and opportunities, and strengthen coordination.

A gender responsive approach to climate action

Different communities experience climate change differently. Their ability to cope, respond and adapt varies depending on where they live, how they earn a living and their socioeconomic status (IPCC 2014a). Climate change has a greater impact on the poor, on people who rely on natural resources for their livelihoods, and on those who have the least capacity (including assets and access to services) to withstand natural disasters and extreme weather events (FAO 2015a).

But even among the populations and communities most vulnerable to the effects of climate change, women are disproportionately affected (UNDP 2016). Yet women are rarely represented in decision making on issues that directly affect their lives, including action on climate change (Profeta 2017).

Women's exclusion from decision making is not simply a question of equity. When it comes to tackling development challenges, women's participation is essential. Evidence from across the globe demonstrates the importance of gender responsive actions for natural resource management, food security, investment in public goods, and many other activities aimed at building climate resilience (FAO 2011, WB 2011). Policy making is also more responsive to community needs when women are included in the process (NDI 2013).



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Gender in the Pakistan context

Gender equality is enshrined in the Constitution of Pakistan, which affirms that all citizens are equal under the law and that there shall be no discrimination on the basis of sex (GOP 1973). The country also continues to build a legislative framework to protect women and advance gender equality (see Annex 3). Implementation and enforcement remain a challenge, however, as reflected in the fact that Pakistan is one of the five most unequal countries in the world for women. In 2021, Pakistan was ranked at 153 out of 156 countries in the Global Gender Gap Report (WEF 2021). The issues are complex and multidimensional: “In a country as diverse as Pakistan, there are contradictions at every level. The gap between theory and practice, between legislation and implementation, urban and rural disparity, and the reality of the average woman are in stark contrast to the progress being made in the political process, in laws passed and at the policy level” (Aurat Foundation 2012).

On the ground, women are excluded from economic opportunities, political participation and decision making (Profeta 2017). Gender based violence is pervasive at all levels of society (UNFPA 2022). These structural and social

Chapter 1: Fundamental Rights

Article 25. Equality of citizens.

- (1) All citizens are equal before law and are entitled to equal protection of law.
- (2) There shall be no discrimination on the basis of sex.
- (3) Nothing in this Article shall prevent the State from making any special provision for the protection of women and children.

– Constitution of the Islamic Republic of Pakistan, 1973

inequalities reinforce the barriers women face in contributing to and benefitting from development initiatives in general. It is important to ensure that women are not excluded from climate related policy making, planning and implementation.

Pakistan acknowledges the differentiated impacts of climate change on women and men, and recognises that both women and men have an equal part to play in climate action. There is also a commitment, both in the law and in government policies, to rectify this imbalance. The Pakistan ccGAP is one more step in this direction.

PART

02

Climate Change Gender Action Plan

Steps to guide gender responsive
actions for resilience and adaptation





Introduction

This Climate Change Gender Action Plan (ccGAP) provides a framework for integrated gender responsive climate action in Pakistan. While addressing the challenges of climate change will require wide ranging measures to be taken across every sector of the economy, the ccGAP identifies six priority sectors that are particularly important for building resilience and where women are likely to be most severely affected:

- Disaster risk reduction
- Agriculture and food security
- Forests and biodiversity
- Integrated coastal management
- Water and sanitation
- Energy and transport.

Priority actions for gender inclusiveness

During ccGAP workshops and consultative sessions, certain common themes emerged across sectors. These themes represent priority actions that are relevant for gender responsive climate action in all sectors. The ccGAP uses these themes as a framework upon which to build its recommendations.

The priority actions required to operationalise these principles are similar and all are equally important. While lead actors in various sectors may differ, the focus and purpose of actions remain the same. These measures are essential for effective implementation of the ccGAP.

Priority cross cutting actions	
Priority action	Key activities
Ensure the participation and representation of women at all levels of climate policy, planning and decision making across sectors	<ul style="list-style-type: none"> Establish quotas to ensure the representation of women in key decision making spaces Consult with stakeholders when designing policies and programmes, including to raise awareness and socialise this ccGAP Develop a roster of key stakeholders and experts to consult during design and implementation
Strengthen coordination and promote institutionalisation to address gender issues and support gender mainstreaming	<ul style="list-style-type: none"> Formalise a Gender Committee with representatives from ministries, women's groups and other stakeholders Identify ministries required to consult the Gender Committee when formulating new policies and programmes Coordinate with the National Commission on the Status of Women (NCSW) to set up thematic working groups to support the work of the Gender Committee
Develop gender responsive climate actions through national and provincial policies and programmes	<ul style="list-style-type: none"> Review existing policies and programmes, and revise or update if necessary to ensure gender responsiveness Designate gender focal points in all relevant ministries and departments to coordinate gender responsive implementation
Collect gender disaggregated data to fill information gaps	<ul style="list-style-type: none"> Design and implement processes to capture gender disaggregated data in all relevant sectors Make this data widely available and ensure its use in the development of new policies and programmes
Invest in context specific research to inform policy making and programming	<ul style="list-style-type: none"> Conduct sector specific gender analyses to inform policy making and programming Ensure research findings are made available to policymakers and practitioners
Develop a framework to monitor progress on ccGAP implementation	<ul style="list-style-type: none"> Develop a ccGAP monitoring and evaluation framework in consultation with the Gender Committee, NCSW and other stakeholders and experts Communicate results from monitoring to inform policy and programming, and to course correct if necessary

Key principles for gender inclusiveness

Participation and representation: Elevate the voices of women, and promote their representation, participation and leadership at all levels of climate policy, planning and decision making.

Coordination and institutionalisation: Identify opportunities to strengthen coordination and institutionalise measures for gender mainstreaming.

Policy and programmes: Develop or update policies and programmes to address and include the needs of women and girls.

Gender disaggregated data: Collect gender disaggregated data, make it widely available, and use it to inform policy and programme decisions.

Context specific research: Invest in context specific research to inform policy making and programming.

Monitoring and evaluation: Develop frameworks to monitor progress on implementation of this ccGAP, to inform new programmes and policies, and to course correct where necessary.

Note on terminology

The IUCN Gender Equality and Women's Empowerment Policy (2018) defines gender responsiveness in the following terms: "To identify and understand gender gaps and biases, and then act on them, developing and implementing actions to overcome challenges and barriers, thereby improving gender equality. Gender responsive has come to mean more than 'doing no harm'; it means 'to do better'" (IUCN 2018a).

A number of other key terms and phrases used throughout the ccGAP require elaboration. For the purposes of clarity and to avoid repetition, those terms are explained here as follows:

- **Agricultural activities:** Includes farming, livestock, forestry, fisheries
- **Decision making:** Refers to all levels, from government ministries and departments at the federal and provincial levels to community level decision making bodies, as relevant; includes decisions on policy, planning and implementation
- **Institutionalisation:** Process to introduce or consolidate behaviours and practices within institutions; includes reform initiatives, rulemaking, developing or introducing best practices, capacity development and training
- **Vulnerable communities:** Vulnerability related to gender, age, disability, ethnicity, religion, poverty; also referred to as marginalised or disenfranchised groups.



1 Disaster Risk Reduction

Pakistan is highly vulnerable to natural disasters. In the last decade alone, it has suffered an estimated USD 18 billion in economic losses as a result of extreme weather events and natural disasters (UNDRR 2019). Between 1998 and 2001, the country experienced severe drought, which cut GDP growth by 50%. This was followed in 2005 by a devastating earthquake in Kashmir, massive floods across the country in 2010, another major earthquake in 2011 and severe floods again in 2012 (GOP 2012a). On average, these disasters have led to a fall of 1.16% in GDP annually (LEAD 2015).

Economic hardship in the wake of natural disasters has a devastating impact on households as well, particularly low income households that are forced to divert scarce resources from productive activities towards survival, rebuilding and recovery. In the aftermath of the 2005 Kashmir earthquake, for example, more than 3.5 million people were rendered homeless. The earthquake affected more than 500,000 families, with 780,000 buildings destroyed or damaged beyond repair and 250,000 farm animals killed (ReliefWeb 2022). Similarly, after the 2010 floods, which submerged nearly one fifth of the country's total land area, some 7 million people were left homeless (Gronewold 2010). The floods directly affected up to 20 million people, destroying infrastructure, property and livelihoods (ReliefWeb 2010).

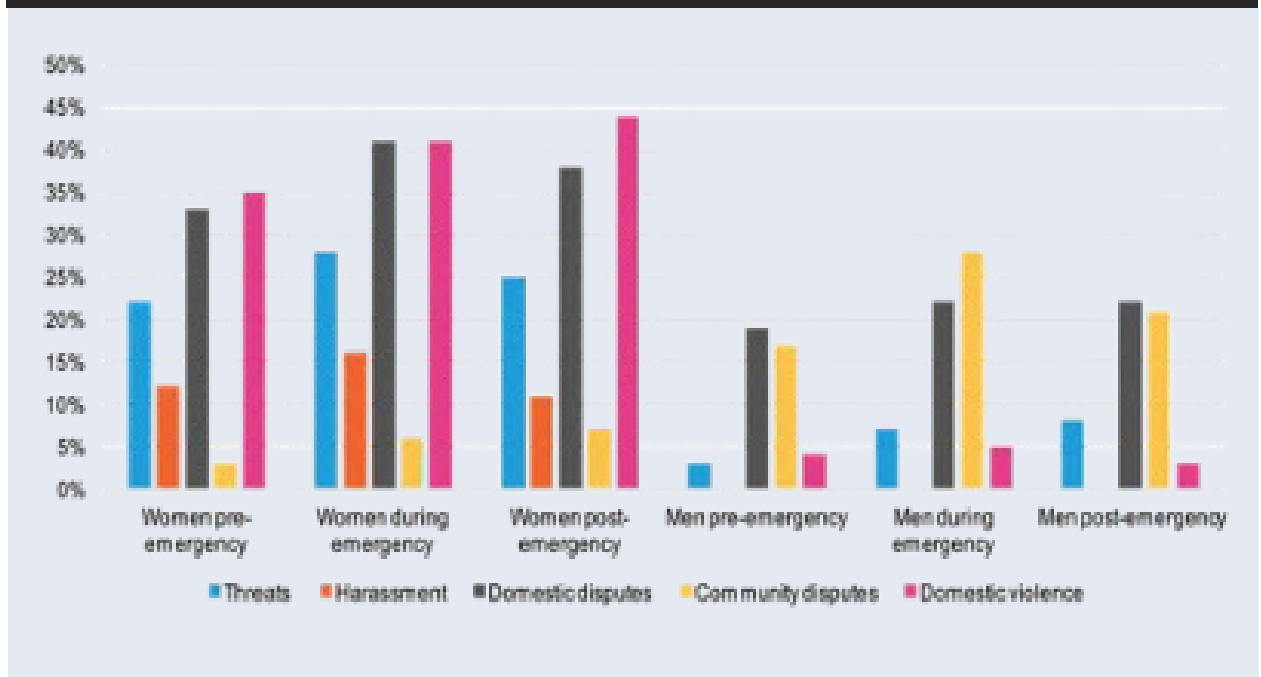
The impact of natural disasters is disproportionately greater on women, children and other vulnerable groups. For example, women and children are 14 times more likely than men to die during a disaster (UNESCO 2020). When a disaster strikes, even among the most vulnerable communities women and girls face additional challenges. These include difficulties in access to healthcare, relief supplies, food distribution points and markets (Oxfam 2017). Women are more vulnerable in relief camps, face crowding and stampedes at distribution points, and are particularly at risk from threats to personal safety. Women and girls are more likely to suffer from waterborne diseases due to a lack of access to safe water and sanitation facilities (UNESCO 2020).

Recovery is also more difficult for women, with agriculture and livestock rearing activities disrupted and limited livelihood opportunities

compared to men, such as migration or seeking employment. Maternal and reproductive health care, education for girls, and many other services are affected, particularly when critical infrastructure is destroyed, which is often the case (Oxfam 2017).

There are other risks that women face in the wake of a disaster that often go unrecognised. Women and girls are more vulnerable to gender based violence after disasters hit (WB and ADB 2010). Following the 2010 floods, for example, violence against women and children increased in flood affected districts (ADB and WB 2012). A survey of disaster prone districts across Pakistan noted similar trends, observing that the reasons for the increase in domestic violence during and after emergencies include lack of proper shelter and the loss of economic and livelihood opportunities, affecting people's ability to meet basic needs (Oxfam 2017).

Types of violence and safety issues faced by households, by gender



(Source: Oxfam 2017)



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Disaster risk profile

- **Balochistan:** Historically, Balochistan has faced the highest risk of tsunamis, cyclones, droughts, earthquakes and floods. In drought affected districts alone, 48% of the population (approximately 2.4 million people) faced food insecurity in 2018, with some districts reporting food insecurity as high as 62% of the population (NDMA and WFP 2017).
- **Khyber Pakhtunkhwa:** The 2011 floods in Khyber Pakhtunkhwa affected more than 14 million people. A study conducted after the 2011 floods in five districts of KP noted that 73% of children between the ages of 10 and 16 displayed symptoms of PTSD, with girls more severely affected, even two years later (Ahmad et al. 2011).
- **Punjab:** The 2010 floods destroyed 570,000 hectares of cropland in Punjab. In 2014, the province faced another devastating flood that killed 257 people and 1.1 million were affected.
- **Sindh:** The 2010 floods were widely acknowledged to have hit Sindh the hardest, with the destruction of agriculture resulting in many women losing their livelihoods. Disasters have also led to increased migration over the last several decades, with men seeking work in urban Sindh or abroad. Frequent droughts have contributed to acute food insecurity (IPC 2017).
- **Azad Jammu and Kashmir:** AJK has experienced many disasters, including floods and earthquakes.
- **Gilgit Baltistan:** An area with many glacial lakes, GB is particularly vulnerable to flash floods, river floods, landslides and avalanches, endangering over 7 million people.

Institutional and policy context

The **National Disaster Management Authority (NDMA)** is the coordinating agency for disaster management. Provincial Disaster Management Authorities (PDMAs) handle disaster management in the provinces along with District Disaster Management Authorities, which are responsible for drawing up disaster management plans at the local level (Ahmed 2013). The NDMA was established under the **National Disaster Management Act of 2010**, which requires provisions be made for vulnerable groups and prohibits gender discrimination in relief and compensation (GOP 2010, Sections 11 and 26). The **Gender and Child Cell (GCC)** at the NDMA is responsible for integrating the needs of women, children and other vulnerable groups into disaster response, emergency management and disaster risk reduction activities. Policy guidelines and standards for emergency response include the **Guidelines for Minimum Standards of Relief in Camp (2017)** and the **National Policy Guidelines on Vulnerable Groups in Disasters (2014)** (GOP 2017a, GOP 2014).

The **National Disaster Response Plan (2019)** acknowledges gender differences in the experience of natural disasters. It notes that policies are most effective when they address the needs and vulnerabilities of different groups including women and children, and calls for a more streamlined institutional role for women (Zaidi 2022).

The **National Disaster Risk Reduction Policy (2013)** recognises the needs of women and other vulnerable groups, noting that their greater vulnerability results in greater losses in the aftermath of a disaster (GOP 2013b).

The **Framework for Implementation of Climate Change Policy (2013)** notes that “women are exposed to higher risks and require special attention during disasters” but makes no mention of gender or women in the proposed actions within the framework (GOP 2013a).

The **National Sustainable Development Strategy (2012)** includes a section on disaster risk reduction in the face of climate change impacts. It advocates multi-sectoral and multi-disciplinary approaches to reduce the vulnerability of women, and aims to strengthen community risk reduction capacities and livelihood practices (GOP 2012b).

The **National Disaster Risk Management Framework Pakistan (2007)** aims to empower women as equal stakeholders, acknowledging their role in maintaining the household economy and preventing the breakdown of social safety nets. Its guiding principles include promoting community and local level preparedness, multi-disciplinary approaches and developing disaster risk management plans with a focus on vulnerable groups including women (GOP 2007).

The **Earthquake Reconstruction and Rehabilitation Authority (ERRA)** was established in 2005 to plan and approve reconstruction projects in earthquake affected areas in nine districts of KP and AJK (ERRA 2022b). It serves as the coordinating body for activities related to post disaster damage assessment, reconstruction and rehabilitation. The **ERRA Social Protection Strategy (2006)** focuses on women and other vulnerable groups in KP and AJK (ERRA 2006). ERRA has also conducted various vulnerability assessments and published reports on women and other groups most at risk (ERRA 2022a).

Khyber Pakhtunkhwa: The PDMA in KP has a GCC which plays an advisory role in planning.

Punjab: The gender mainstreaming initiative of the Punjab PDMA aims to ensure that disaster response and rehabilitation is gender inclusive and sensitive to the needs of vulnerable groups. The

project focuses on strategic planning, capacity building and collecting gender disaggregated data (Government of Punjab n.d.). The Punjab PDMA has also established a GCC to ensure that the needs of women and other vulnerable groups are included in disaster relief and response measures (Government of Punjab n.d.).

Sindh: The Disaster Risk Management Plan Sindh Province (2008) assigns responsibilities for the gender component of disaster risk reduction to the provincial Women Development Department, which is tasked with raising awareness among decision makers about the special vulnerabilities of women; facilitating the involvement of women in the management of relief, rehabilitation and reconstruction; and ensuring that the needs of women survivors are addressed in disaster relief, rehabilitation and reconstruction activities. It is also responsible for promoting awareness amongst women in hazard prone areas about disaster risks and preparedness; developing the capacities of women's organisations; supporting the rehabilitation of livelihoods; and managing women's crisis centres (Government of Sindh 2008).

AJK: The State Disaster Risk Management Plan (2017) aims to enhance women's safety during emergencies and address women's needs following disasters, such as adequate facilities in relief camps, protection from harassment and vocational training for income generation (Government of AJK 2017).

Programmes and initiatives

Disaster preparedness initiatives that incorporate the needs of women strengthen their capacity to act during emergencies, thereby reducing their vulnerability. Various disaster preparedness programmes have been implemented across the country but not all interventions contain provisions for women.

The Scaling-up of Glacial Lake Outburst Flood Risk Reduction in Northern Pakistan project seeks to build resilience through the deployment of early warning systems and the construction of engineering structures including dams, ponds, spillways, and drainage, and tree plantation to reduce the risk of flash floods. It aims to target "at least 30-50% women" in all activities (GCF 2022). The project has developed a gender action plan proposing measures to narrow gender inequality, offset risks of adverse gender impacts, ensure women's participation, promote women's leadership, and "ensure women are included as planners, co-implementers and agents of change" (GCF 2018).

The Promoting Integrated Mountain Safety in Northern Pakistan project, concluded in 2021, aimed to strengthen community ownership and involvement in disaster risk management. Interventions included early warning systems, infrastructure, community mobilisation and the formation of community emergency response teams. The project developed monitoring mechanisms to ensure gender equality and inclusiveness (NDRMF 2019).

The Building Disaster Resilience in Pakistan project, closed in 2020, included activities focused on women. It trained female government officials, professional staff, extension workers, private sector field workers and farmers on disaster preparedness and climate resilient practices. It aimed to implement women-friendly community based disaster risk reduction schemes through public-private partnerships (UNDP 2022a). Other projects have provided training to women in disaster prone areas of GB, with trainees becoming part of community emergency response teams (AKDN 2020).

Action Plan: Disaster Risk Reduction

Outcome: The safety and resilience of all Pakistanis is strengthened through gender responsive climate disaster risk reduction, preparedness, response planning and implementation

Activity	Lead actors	Indicators of success
Objective: Ensure the inclusion of women, particularly those from vulnerable communities, in all policy, planning and decision making		
Establish requirements for the inclusion of women and women-led organisations, in all DRR policy making and planning bodies at the national and provincial levels	National Disaster Management Authority (NDMA), Provincial Disaster Management Authorities (PDMAs)	Number of women employees at NDMA and PDMAs Number of women included in DRR policy, planning and decision making processes
Set up a coalition to lobby for equal representation of women in national and provincial policy making, and to provide women a platform to voice their concerns	National Commission on the Status of Women (NCSW), Provincial Commissions on the Status of Women (PCSWs)	Number of new gender responsive actions and recommendations included in national and provincial policies
Set quotas for the inclusion of women in all district and municipal DRR authorities	District Disaster Management Authorities (DDMAs)	Number of women employees in DDMAs
Develop mechanisms for community consultations that include women, particularly in disaster prone areas, to make local DRR plans responsive to the needs of women and girls	PDMAs, DDMAs	Increased number of local community groups and women's groups consulted by DDMAs
Ensure that women are included in relief camp planning and management so that the needs of women and girls, including safety concerns, can be fully addressed	NDMA, PDMAs	Increased number of women included in planning and management committees
Champion local knowledge and best practices on DRR at the community level, using perspectives and knowledge from the elderly and from indigenous communities, to design and implement gender responsive DRR plans that are context specific	DDMAs, community based organisations (CBOs)	Number of context specific and gender responsive DRR plans developed using local and indigenous knowledge and best practices

Activity	Lead actors	Indicators of success
Identify key stakeholders, such as community elders, religious leaders, journalists and civil society activists, to serve as allies and to support and promote an enhanced role for women in DRR decision making at the local level	DDMAs, CBOs	Number of champions identified Number of women participating in local level DRR decision making
Objective: Strengthen and institutionalise gender mainstreaming in all policies and programmes for disaster risk reduction, as well as within management authorities and bodies		
Review current DRR policies, plans and guidelines to identify gaps in gender inclusion and opportunities for strengthening inclusion, and to recommend revisions	NDMA	Number of policies, plans and guidelines reviewed Number of policies, plans and guidelines revised
Use findings from the DRR policy review to develop a gender inclusion policy for DRR to guide future planning and implementation	NDMA	DRR gender policy approved
Amend legislation or enact new legislation to ensure that gender inclusion is legally mandated in all DRR policy, planning and implementation, as well as in all departments and ministries	Women's Parliamentary Causes (National and provincial assemblies)	Number of laws amended or enacted to include gender focus in DRR
Establish a sub-commission on DRR at the NCSW to lobby for and support work on gender integration in DRR policy, planning and decision making, and to serve as a coordinating body for gender responsive actions across ministries	NCSW	Sub-commission established Number of sub-commission meetings Number of lobbying initiatives or actions
Designate gender focal points in all DRR related ministries, departments and agencies	MOCC, NDMA, PDMA	Number of gender focal points designated

Activity	Lead actors	Indicators of success
Ensure that funds are set aside in budgets for DRR activities that focus on the needs of women	NDMA, PDMA	Budget allocations for gender inclusion
Hold policy dialogues with parliamentarians on gender equity in DRR in the context of climate change challenges	MOCC, NCSW, Women's Parliamentary Caucus	Number of policy dialogues held
Objective: Build stakeholder capacity on linkages to gender in programmes for disaster risk reduction		
Map key stakeholders and identify their capacity needs for gender responsive DRR activities	NDMA, PDMA	Stakeholder mapping study
Based on stakeholder mapping, conduct training and capacity development to strengthen gender responsiveness in DRR activities	NDMA, PDMA	Number of capacity development initiatives and activities
Conduct awareness raising and training workshops on the linkages between gender, DRR, and climate challenges	MOCC, federal and provincial ministries and departments	Number of workshops conducted
Work with the media, including through training, to build capacities for gender focused reporting in the wake of disasters	MOCC and NDMA gender focal points	Number of articles and media reports on gender-specific issues and concerns in the wake of disasters
Identify ambassadors at the community level (women, youth, religious leaders) to promote dialogue on gender responsive DRR and strengthen community mobilisation	PDMA, DDMA, civil society organisations (CSOs)	Number of ambassadors identified Number of community dialogues conducted
Develop learning materials to integrate gender-DRR-climate knowledge into the curricula of schools, colleges and universities	Higher Education Commission (HEC), provincial education departments, research institutions	Number of courses or other learning materials developed and delivered

Activity	Lead actors	Indicators of success
Develop a communications campaign to build awareness on gender and disasters, with inclusion of intergenerational knowledge	MOCC, NDMA, PDMAs	Communications campaign launched
Objective: Facilitate and empower women on disaster risk reduction knowledge, tools and networks		
Ensure early warning systems are adapted to local contexts and designed to reach women, taking into account differences in the ways that women and men are able to access information	Pakistan Meteorological Department (PMD)	Number of women who have access to or are reached by early warning systems
Provide safe and adequate facilities in tsunami shelters, relief camps and other emergency protection spaces, designed to meet the needs, including safety concerns, of women and children	DDMAs	Number of women-specific facilities established Number of facilities upgraded to cater to the needs of women and children
Expand post-disaster relief systems, including emergency cash transfer schemes, rations distribution drives and healthcare, to ensure that women are directly able to access these services	Poverty Alleviation and Social Safety (PASS) Division, Benazir Income Support Programme (BISP), PDMAs	Number of women able to directly access post-disaster emergency relief services
Include disaster vulnerability in targeting criteria used in existing cash transfer schemes for women (BISP) to ensure that they are able to access benefits automatically in the wake of a disaster	BISP, National Socio-Economic Registry (NSER)	Targeting criteria revised to include disaster vulnerability Number of new beneficiaries added to NSER database
Ensure that eligibility requirements and paperwork, such as possession of computerised national identity cards (CNICs) and bank accounts, do not prevent women from accessing emergency services	National Database and Registration Authority (NADRA), commercial banks	Number of women issued CNICs Number of women provided with bank accounts

Activity	Lead actors	Indicators of success
Design and implement disaster insurance schemes, particularly for women who depend on land and natural resources for their livelihood	PASS Division, insurance companies	Number of women enrolled in disaster insurance schemes
Provide interest-free loans to women running businesses or income generation activities affected by disasters	Commercial banks, microfinance institutions	Number of women provided interest-free loans to rebuild their livelihoods
Ensure that post-disaster reconstruction prioritises the housing needs of women-led households and the education of girls	Earthquake Reconstruction and Rehabilitation Authority (ERRA), NDMA	Number of women-led households relocated to safe and quality housing Number of damaged or destroyed girls' schools reopened or rebuilt
Set up a helpline for the reporting of gender based violence (GBV) and child marriage, to protect women and girls during disasters (similar to the Ministry of Human Rights helpline)	NDMA, National Disaster and Risk Management Fund (NDRMF)	Helpline established Number of cases of GBV and child marriage reported
Objective: Collect and make accessible gender disaggregated data on the impact of disasters and risk reduction activities to identify and understand women's needs and priorities		
Conduct disaster risk assessments for all disaster prone areas, with particular focus on the needs of and challenges faced by women	MOCC, NDMA	Number of gender sensitive disaster risk assessments conducted
Conduct a gaps analysis on the need for gender disaggregated data for DRR, including the establishment of uniform definitions to ensure consistency in data collection	NDMA, PDMA, research institutions	Gaps analysis conducted, data gaps identified Uniform definitions developed and in use for data collection
Collect gender disaggregated data on all aspects of DRR to capture the differential impact of disasters on women and men	NDMA, PDMA, Pakistan Bureau of Statistics (PBS)	National surveys include questions related to DRR Number of gender disaggregated datasets developed

Activity	Lead actors	Indicators of success
Conduct area specific post disaster needs assessments focusing on the priorities and concerns of women and girls	PDMA, research institutions	Number of post disaster needs assessments conducted and published
Document internal displacement and migration related health and safety needs of women	NDMA, ERRA	Number of studies on internal displacement and migration published
Conduct research on the links between gender-based violence and disasters	Research institutions	Number of studies published
Document local knowledge and traditional best practices on disaster management and risk reduction (adaptation, coping, recovery)	Research institutions	Number of studies on local and traditional knowledge published
Build the capacity of national institutions focusing on the links between climate change and DRR to strengthen understanding of the differential impacts on women of climate related disasters	MOCC, NDMA, research institutions	Number of research projects developed with gender aspects included
Work with institutions focusing on climate-applied research to ensure that research is gender inclusive and gender responsive	Research institutions	Number of gender inclusive and gender responsive research studies developed
Objective: Monitor and evaluate ccGAP implementation to strengthen gender responsive action for disaster risk reduction		
Develop benchmarks and indicators to monitor progress on implementation of gender sensitive DRR actions	MOCC	Monitoring framework developed Baseline data collected
Establish a mechanism for periodic review of progress on ccGAP implementation	MOCC, IUCN Pakistan (IUCNP)	Mechanism established Progress reports published



2 Agriculture and Food Security

Agriculture is the largest sector of Pakistan's economy, employing close to half of the country's labour force and accounting for 23% of GDP (PBS 2022a, WB 2022a). It is also one of the sectors that is most vulnerable to the impacts of climate change, with intense pressure on agricultural land, increasing water scarcity and changing weather patterns putting food security at risk (Asim et al. 2020). At the same time, agriculture is a major contributor to GHG emissions, making it all the more important to strengthen adaptive capacity while cutting net emissions (UNDP and GGCA 2016b).

Agriculture is also central to the livelihoods of Pakistani women, especially those residing in rural areas, the majority of whom are engaged in some form of agricultural activity. This makes women particularly vulnerable to the impact of climate related stresses on agricultural production.

Across the country, women are among the millions of landless labourers and small farmers fighting rural poverty. They are involved in farming, livestock rearing and running cottage industries. They support male members of the household in crop production, harvesting and processing, and take on additional responsibilities when men seek work off-farm or migrate in search of employment. In many parts of the country, women are responsible for livestock rearing, the collection of fuel wood and fetching water for household needs. Women's roles and responsibilities differ, depending on geographical area, farming practices, and local customs and traditions (FAO 2015c). While climate action for the agriculture sector must take into account women's roles in and contribution to agricultural production (UNDP and GCCA 2016a), context-specific actions are required.

- **Balochistan:** Since only around 2% of land in the province is cultivated at any time, agricultural activity is limited. Women are responsible for weeding, seed cleaning, drying and storage of crops and fruit, and cotton picking. They are also involved in cottage industries based on agriculture and livestock, such as wool spinning, knitting, rug manufacturing and the preparation of processed foods, but face difficulties in access to markets.
- **Khyber Pakhtunkhwa:** Women play an important role in generating household income. They are engaged in post-harvest activities, such as husking, grading, cleaning and storage. Women are also responsible for livestock management, including poultry, sheep, goats, cows and buffalo. It is worth noting that the contribution of livestock farming to provincial GDP is greater than that of crops. Considering the key role that women play in livestock management, it is safe to assume that they make a significant contribution to the provincial economy even though this remains largely unrecognised (FAO 2015c).
- **Punjab:** Women participate in wheat, cotton, fruit and vegetable harvesting. In the case of

fruit production, women are also involved in post-harvest processing, including cleaning, washing and packing. Women are responsible for livestock rearing, including cattle grazing, cleaning animal sheds, milking and watering animals, fodder collection, poultry management and egg collection (FAO 2015c).

- **Sindh:** The province has witnessed a wave of out-migration from rural areas, with men moving to the cities in search of employment. Women fill the gap, managing on-farm and off-farm activities. Cotton and rice cultivation accounts for around one third of women's agricultural activities (FAO 2015c).
- **Azad Jammu and Kashmir:** Women are major contributors in all farm related activities, particularly crop processing. Women are also involved in livestock and poultry management, vegetable production, collecting fodder and fetching water, along with fuel wood collection and preparation (FAO 2015c).
- **Gilgit Baltistan:** Women make up 49% of the workforce in GB and play an active role in agriculture and related activities, including crop production, horticulture, forestry, livestock management and post-harvest operations (WB 2022b).

While around 65% of Pakistani women are engaged in agriculture (WB 2022b), much of their labour is unpaid and only 4% of landowners are women (NIPS 2013). Women have limited land rights, lack access to capital and are excluded from decision making processes. Other factors that limit women's role in the sector include lack of skills and training, difficulties in accessing markets, and gender bias in access to technology (FAO 2015c).

Building women's resilience in agricultural production will strengthen livelihoods and improve food security. It will also have knock-on effects on child health and nutrition, as well as broader social, development and human rights implications. In many low income households, for example, the early marriage of girls is a way to

reduce the number of mouths to feed (UN Women 2019). When climate change impacts or natural disasters render a family's situation precarious, marrying off girls at a young age is an attempt to

“shift responsibility of the safety (and dignity) of young girls in conditions of displacement and to use bride money as rehabilitation cash for the family” (UN Women 2019).

Agriculture profile

Pakistan is a highly ecologically diverse country, with 12 agro-ecological zones where more than 35 types of mixed farming systems are practised (GOP 2018a).

- **Balochistan:** With arid climate and scarce irrigation water, only around 2% of the land area is cultivated at any time while 30% is used as rangeland. Agriculture, livestock and fisheries account for 54% of provincial GDP (livestock contributes 40%, fruit 30%, fisheries 12%). Some 72% of the rural population is involved in agriculture, livestock rearing, forestry and fisheries. The main crops are wheat, pulses and barley, and major fruits include apple, almond, grapes, dates, pistachio and cherry (Government of Balochistan 2021).
- **Khyber Pakhtunkhwa:** Agriculture contributes 40% to provincial GDP and employs around 50% of the labour force. More than 40 crops are grown in the province, including wheat, rice, barley, maize, sugarcane, tobacco, rapeseed, mustard, groundnut, pulses, vegetables and fruits. The province also produces 78% of Pakistan's total tobacco yield. Livestock farming is common, with more than 15 million animal heads and about 22 million poultry (Government of KP 2022).
- **Punjab:** Agriculture accounts for 24% of provincial GDP. Major crops and fruits grown in the province include wheat, rice, cotton, sugarcane, vegetables, pulses, fodder, mango and citrus. Livestock is the single largest sector in Punjab, contributing to 53% of total agricultural value addition (Government of Punjab 2022).
- **Sindh:** Outside of Karachi, the country's largest commercial centre, the economy of Sindh relies heavily on agriculture. The main crops grown in the province include wheat, cotton, rice, sugarcane, mango and banana. Over the last several decades, the province has seen a wave of migration, with men travelling to urban centres or abroad in search of employment.
- **Azad Jammu and Kashmir:** Farm size and landholdings in AJK are small, making agriculture less profitable. The most commonly grown crops are maize, rice, wheat and millet. Minor crops include pulses, gram, oilseeds and vegetables.
- **Gilgit Baltistan:** The majority of households are engaged in agriculture and have small landholdings. Agriculture, livestock and forestry contribute to around 40% of GB income. Major crops include wheat, potato, fodder, barley, maize and vegetables (Government of GB n.d.).

Legal and policy context

The **Sindh Women Agriculture Workers' Act of 2019** is landmark legislation that aims to eliminate the exploitation of women agricultural workers. It provides formal recognition of women's labour in the agriculture sector, including farming, livestock and fisheries, and gives women the right to form unions (Mansoor 2019).

The law mandates equal pay for women agricultural workers and requires that they cannot be paid less than minimum wage. Women cannot be forced to work for more than eight hours a day, and are entitled to 120 days of maternity leave, as well as other benefits related to maternal health and childcare. Women have the right to access government agricultural, livestock, fisheries and other services, as well as credit, social security, subsidies and asset transfers.

The law prohibits discrimination in employment, wages and working conditions on the basis of sex, land ownership, caste, religion, ethnicity or residential status. It guarantees a work environment free of harassment and abuse.

The **National Food Security Policy (2018)** aims to promote sustainable food production systems, and to make agriculture more productive, profitable, climate resilient and competitive. The policy outlines measures to improve farmers' access to quality inputs such as seed, fertiliser, pesticides and credit. The policy recognises as a major challenge the need to mainstream women's contributions in value added agriculture and family nutrition (GOP 2018a).

The **National Sustainable Development Strategy (2012)** recommends the introduction of "a programme for land allotments to empower women and give them a sense of ownership for agriculture production and provide them a right to ensure food security for their families" (GOP 2012b).

The **KP Women Empowerment Policy (2017)** identifies the need for women's participation in the labour force, including agriculture. It aims to strengthen women's participation in sectors such as agriculture and food (Government of KP 2017).



Programmes and initiatives

Agriculture development and food security initiatives generally target men. Partly because women's contribution goes unrecognised and their labour is unpaid, only a few projects have focused exclusively on women or included women in capacity building activities.

The Better Cotton Initiative aims to create opportunities for women in agriculture, providing training in sustainable farming techniques. It has trained close to 120,000 women across the country, some of whom work as field facilitators (Better Cotton 2018).

In GB, the Economic Transformation Initiative, concluded in 2022, aimed to increase agricultural income and employment with a focus on women. It trained women producers in innovative

agricultural techniques, and provided support for harvesting and marketing (IFAD 2020).

The Sindh Agricultural Growth Project, closed in 2021, aimed to strengthen the capacity of producers, modernise extension services and agricultural research, and improve strategic planning for the agricultural sector. One of its areas of focus was to ensure nutrition and food security for women, and to train women producers (WB 2022d).

Also in Sindh, the Improved Land Tenancy project, closed in 2020, established field schools to train farmers, including women, in improved practices (FAO 2021). Other initiatives in the province have provided skills training to small scale livestock producers, including training for women in livestock management, farm management, disease prevention, farm sanitation and hygiene, and feeding (PARC n.d.).

Action Plan: Agriculture and Food Security

Outcome: Food security is enhanced for all Pakistanis through gender responsive, climate smart agriculture policies, programmes and practices

Activity	Lead actors	Indicators of success
Objective: Ensure the inclusion of women, particularly those from vulnerable communities, in all policy, planning and decision making		
Establish requirements for the inclusion of women in all agriculture and food security policy making and planning bodies at the national and provincial levels	Ministry of National Food Security and Research (MNFS&R), provincial agriculture departments	Number of women employed in relevant ministries and departments
Establish local level working groups that include representation from women and other vulnerable groups	Provincial agriculture departments	Number of community representatives in working groups
Set quotas for women in all local level decision making bodies, including emphasis on vulnerable community representation	Provincial agriculture departments	Number of women participating in decision making bodies
Organise national and provincial dialogues on the role of women in agriculture, bringing together women farmers and policy makers	MOCC, MNFS&R, provincial agriculture departments, agriculture universities, research institutions	Number of national and provincial dialogues held
Establish lobby groups to ensure women's voices are heard at all levels of governance and in all relevant policies and decision making spaces	NCSW, PCSWs	Lobby groups established Women's concerns incorporated into policies
Objective: Strengthen and institutionalise gender mainstreaming in all policies and programmes for agriculture and food security, as well as within management authorities and bodies		
Appoint a gender focal point for the national ministerial level committee on agriculture and food security	MOCC, MNFS&R	Gender focal point appointed

Activity	Lead actors	Indicators of success
Conduct a gender review of national and provincial agriculture and food security policies and programmes to identify gaps in addressing issues of importance to women	MOCC, MNFS&R, provincial agriculture departments	Number of agriculture and food security policies and programmes reviewed with a gender lens
Use findings from the gender review to revise and update policies and programmes, including a gender responsive agriculture and livestock extension strategy to ensure women farmers know of and are able to access available benefits	MOCC, MNFS&R	Number of policies and programmes updated
Ensure integrated environmental impact assessments (EIAs) and gender assessment checklists are used at the PC-I development stage for all programmes and schemes	MOCC	Number of PC-IIs containing EIA and gender assessment components
Integrate gender responsiveness into provincial and district level planning for agriculture and food security	Provincial agriculture departments, district authorities	Number of gender responsive plans developed
Hold policy dialogues with parliamentarians on gender equity in agriculture and food security in the context of climate change challenges	MOCC, NCSW, Women's Parliamentary Caucus	Number of policy dialogues held
Design a mechanism for coordination between departments at the federal and provincial levels for effective implementation of gender mainstreaming actions	MOCC, IUCNP	Coordination mechanism established

Activity	Lead actors	Indicators of success
Objective: Build stakeholder capacity on linkages to gender in programmes for agriculture and food security		
Build the capacity of national institutions focusing on the links between gender, climate change and food security to strengthen understanding of the differential impacts of climate change on women in agriculture	MOCC, MNFS&R, research institutions	Number of research projects developed with gender aspects included
Launch education campaigns and conduct knowledge building programmes for communities, focusing on climate change impacts on agriculture, the specific impacts on women and the importance of adaptation to address future challenges	MOCC, provincial agriculture departments	Number of media campaigns and education programmes
Conduct awareness raising and training workshops on the linkages between gender, agriculture and food security, and climate challenges	MOCC, federal and provincial ministries and departments	Number of workshops conducted
Train project managers in all line ministries and provincial departments to incorporate gender and climate components in their project proposals	MOCC, provincial agriculture departments	Number of new projects with strong gender and climate components included
Develop gender specific local adaptation plans for climate change impacts on agriculture	Provincial agriculture departments, district authorities	Number of local adaptation plans developed
Develop training programmes employing climate adaptation tools and techniques for improved agricultural production	Provincial ministries and departments, non-governmental organisations (NGOs), CSOs	Number of training programmes developed Number of women trained Number of adaptation tools and techniques introduced at the community level

Activity	Lead actors	Indicators of success
Strengthen the capacity of research organisations to run climate models for developing climate projections and assessing the impact on women and men farmers accordingly	Agriculture universities, research institutions	Number of organisations able to carry out climate modelling for projections and planning
Coordinate with agriculture and food security research institutions, universities and departments to integrate gender specific aspects in their curricula	Agriculture universities, research institutions	Number of courses with gender specific aspects developed and delivered
Build the capacity of women farmers in the use of technologies that are gender responsive and address climate challenges	MNFS&R, provincial agriculture and agriculture extension departments	Number of women trained in the use of climate smart technologies
Identify male champions in communities to serve as agents of change for gender equality	CBOs	Number of male champions working on gender equality and climate change
Objective: Facilitate and empower women engaged in agricultural activities and food production		
Develop and implement gender responsive agriculture development and livestock extension programmes that cater to the specific requirements of women	Provincial agriculture and livestock departments	Number of gender responsive agricultural and livestock extension programmes launched
Set up seed banks to collect and propagate climate resilient seed varieties and make these available to women farmers	MNFS&R, Pakistan Agricultural Research Council (PARC), provincial seed councils	Number of seed banks set up Number of women farmers planting climate resilient crop varieties
Provide agricultural land to poor and vulnerable women, to secure their livelihoods and ensure they have equitable access to resources	MNFS&R, provincial agriculture departments	Number of women owning agricultural land

Activity	Lead actors	Indicators of success
Strengthen livelihood opportunities for women farmers by providing technical and financial support to establish nurseries	Provincial agriculture and livestock departments, district agriculture authorities	Number of women run nurseries
Train women farmers in the use and application of climate smart technology, including improved irrigation techniques, to improve yields and make livelihoods more secure	MNFS&R, provincial agriculture and agriculture extension departments	Number of women trained Number of women using climate smart technology
Improve access to finance for women farmers and facilitate credit for women farmers	Commercial banks, microfinance institutions	Number of finance schemes developed for women Number of women able to access financial services
Establish women farmers cooperatives for climate adaptation at the union council (UC) level, bringing together village associations of women farmers	District administrations, district agriculture departments, CSOs	Number of UC level women farmers cooperatives established
Develop and launch climate smart pilot urban farming and vertical farming projects, with women trained to operate and manage them	MOCC, MNFS&R, private sector, incubators	Number of women led climate smart urban farming and vertical farming projects launched
Promote women's entrepreneurship in agriculture and food production by removing bottlenecks and providing financial and other incentives, such as tax breaks, business incubation and mentoring programmes	MOCC, federal and provincial ministries and departments, tech incubators, chambers of commerce	Number of women setting up new businesses in agriculture and food production
Objective: Collect and make accessible gender disaggregated data on agriculture and food security to identify and understand women's needs and priorities		
Conduct a vulnerability risk assessment of the agriculture sector, focusing on the gendered aspects of climate change impacts	MOCC, research institutions	Climate vulnerability risk assessment study addressing gender and agricultural sector

Activity	Lead actors	Indicators of success
Gather information on gender differences in resource access and use, particularly in communities most vulnerable to climate change impacts	Provincial agriculture departments, research institutions	Information collected and made publicly available
Conduct assessments and studies to build knowledge on women's changing role in agriculture in the context of climate change	MOCC, research institutions	Number of studies published
Conduct a study on women's agricultural land ownership in Pakistan, addressing barriers to ownership and the impact on livelihoods and food security	MOCC, research institutions	Study on women's agricultural land ownership published
Review legal regimes and customary law related to women's property rights and land ownership, and lobby to ensure that rights are equitable	NCSW, PCSWs, Parliamentary Women's Caucuses	Legal review conducted with reform proposals identified Meetings with lawmakers
Objective: Collect and make accessible gender disaggregated data on agriculture and food security to identify and understand women's needs and priorities		
Develop benchmarks and indicators to monitor progress on implementation of gender sensitive actions in agriculture and food security	MOCC	Monitoring framework developed Baseline data collected
Establish a mechanism for periodic review of progress on ccGAP implementation	MOCC, IUCNP	Mechanism established Progress reports published



3 Forests and Biodiversity

The majority of Pakistan's population resides in rural areas (63%) and relies on natural resources for subsistence (WB 2015). This includes agriculture but also involves activities to meet nutrition needs and supplement household income, such as foraging for and trading in non-timber forest products and other natural resources, work that is carried out mostly by women.

Women are at a disadvantage when it comes to access to and control over natural resources, and gender roles in forestry value chains are poorly understood. Men and women use natural resources differently. Women's use tends to centre on low return products and activities, while men control the production and commercial exploitation of more profitable resources (Kiptot and Franzel 2012). In rural communities, it is mostly women who are responsible for managing land and livestock, and for providing sustenance for their families. This structures their resource use patterns and management priorities. Time poverty and physical safety concerns can restrict women's access to resources, while household responsibilities limit the time they are able to spend on forestry and agroforestry income generating activities (Grassi et al. 2015). This is one of the reasons why women's participation in value chains is mainly in the areas of harvesting and small scale retail trade, while men are involved in large businesses and high value activities.

These gendered roles extend beyond use patterns and economic benefits. Deeper structural issues also need to be taken into consideration.

Economic rights, including the right to inherit and own land and resources, are often held by male members of the family. Women have the right to access resources but have little or no control over these resources, including in decisions on how resources are used or managed. Social norms restrict women's participation in forest governance on an equal footing with men (UN-REDD 2011). Women usually have little say in decision making regarding forest management, utilisation and benefit sharing. It is generally the men who make decisions about forests and biodiversity management including land use, demarcation, plantation, harvesting, conservation and benefits.

Women also possess highly specialised local knowledge of ecosystem resources and management practices. Yet they are underrepresented in forest management and biodiversity conservation activities (Hansen et al. 2016).

Forestry and natural resource management activities designed with these gendered roles in mind not only improve resource management but can also help to reduce women's vulnerability by creating economic opportunities and raising their social status (Marin and Kuriakose 2017). Empowering women in the forests and biodiversity sector can strengthen women's livelihoods, with important spillover benefits for their households and communities, such as food security, improved health and access to education.

Forests and biodiversity profile

Pakistan has 4.2 million hectares of forest and planted trees, covering around 4.8% of the total land area. With only 0.05 hectares of forest per capita against a world average of 1.0 hectares, Pakistan is forest poor (FAO n.d.). Overall forest cover in Pakistan is also low compared to the global average (WB 2022e).

By forest type, coniferous forests have the largest coverage (41%) followed by scrub (35%), coastal forests (11%), riverine (7%) and irrigated plantation (5%) (UNDP n.d.).

Deforestation is been increasing. From 2001 to 2020, Pakistan lost 9,680 hectares of tree cover, equivalent to a 0.99% decrease in tree cover since 2000. In 2020 alone, Pakistan lost around 69.2 hectares of tree cover (GFW 2022).

- **Balochistan** is the largest province by land area, with forest cover of just 1.5% along with 26.7% of rangeland. The province is home to ancient juniper forests considered to be among the oldest forests in the world (Khan et al. 2021).
- **Khyber Pakhtunkhwa** has the highest forested area compared to other provinces. It is home to about one third of the country's forest and 40% of its natural forest (Khan et al. 2021).
- **Punjab**, the country's most populous province, has low overall forest cover at about 4%. Scrub forest is the dominant type (2%), along with riverine and broad leaf (0.7%) (Khan et al. 2021).
- **Sindh** has 6% of forest cover consisting mainly of mangroves (3.5%) and riverine (1.4%) forests (Khan et al. 2021).
- **Azad Jammu and Kashmir** has a total land area of 1,329,729 hectares, of which 566,740 hectares or 42.6% consists of forests (Khan et al. 2021).
- **Gilgit Baltistan** extends over an area of 72,971 km² with 1,582 km² of forest cover (Khan et al. 2021).

Policy context

The **National Biodiversity Strategy and Action Plan (2017-30)** contains a section on 'Gender, Poverty, and Biodiversity Nexus' (GOP 2017b). It recognises that men and women have different patterns of natural resource use and that their requirements need to be factored into conservation programmes. It notes that biodiversity loss and the lack of access to natural resources near their homes increases women's workload and economic hardship. It states that gender sensitive and gender responsive conservation programmes will also be more socially acceptable and sustainable in the long run. Its Strategic Goal D ('Enhance the benefits to all from biodiversity and ecosystem services') sets a target that includes women: "By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and wellbeing, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable" (Target 14).

The **National Forest Policy (2015)** was approved by the Council of Common Interests in 2017. But forestry is a provincial subject and the provinces have yet to arrive at a consensus on its recommendations. The policy does not mention women or gender, nor is the role of communities acknowledged. It focuses on plans to purchase private and communal degraded forest land with the consent of the forest owners and rightsholders. It notes that "all provinces shall secure traditional and customary rights of forest resource users" (GOP 2015).

The **National Sustainable Development Strategy (2012)** proposes public-private partnerships and farm forestry initiatives involving women as custodians (GOP 2012b).

Land use and biodiversity

More than 60% of land in Pakistan is either open access or common property, the latter usually governed by customary rules that determine who can access resources and how much they can take. Open access resources include mountain ecosystems, rangelands, wetlands, coastal areas and forests (GOP 2017b). These resources have depleted over time and ecosystems have deteriorated. As far as ownership is concerned, only 4% of landowners in Pakistan are women (NIPS 2013).

In forest dependent communities, women are generally responsible for grazing livestock and collecting firewood and other non-timber forest products for household consumption. These activities significantly contribute to the household economy. With rapid resource depletion, the livelihoods of communities have also been affected, resulting in increased poverty and poor health outcomes, particularly for women and children (GOP 2017b). Gender considerations cut across all thematic areas of biodiversity

conservation and should be an integral component of strategies and action plans for conservation (GOP 2017b).

Programmes and initiatives

Pakistan inherited a top-down command and control forest management system from the British colonial administration at the time of Independence in 1947. This set the tone for forest management until reforms were introduced in the 1990s, when community participation was introduced for forest management. In some areas, community involvement in forest management was later deemed a failure even though the failure lay not in the role of communities but in the inability to prevent vested interests from hijacking the system (Fischer et al. 2010). In fact community participation in forestry and conservation has shown positive results in areas where vested interests could be kept at bay (Fischer et al. 2010). For example, trophy hunting in GB (Durrani 2016), community action to stop illegal harvesting in the Basho and Gudai valleys in GB (Ali et al. 2005), and mangrove forest conservation in Sindh

(Government of Sindh 2022), have all been successfully implemented with community participation.

Many community forestry projects have included women. The most recent of these is the Green Growth Initiative, an ambitious tree plantation programme which actively seeks the participation of women and supports women's entrepreneurship (*The News* 2020). Under the programme, women are involved in various activities such as plantation, establishing nurseries and working as forest guards (APP 2021, *The Nation* 2022).

Women have been involved in nursery projects in the past, including forest plantation initiatives in KP (Saeed 2016) and social forestry programmes in GB (AKRSP 2020). An innovative mangrove forest conservation initiative in the coastal areas of Sindh also involves women not just for plantation but to serve as forest rangers to protect the mangroves against threats from animals and humans (Kunbhar 2021).

While land and forest ownership among women in Pakistan is rare, Chitral is an exception. There, the provincial government allotted a 60% share of forest royalties to local communities and rightsholders, including women. Under this initiative, women of Chitral received a share in forest royalties from the sale of timber for the first time in 2018. This is a major step towards securing women's rights to ownership of land, forests and natural resources (IUCN 2018b). Various other forestry projects have been implemented across the country, some of which contained components or activities for women. Many of these projects concluded decades ago, as funding opportunities and donor priorities shifted.

The Sustainable Forestry Development Programme implemented in the 1990s established more than 2,500 women's organisations in Chitral and GB, conducted plantation drives and trained women to establish nurseries (Nyborg and Ullah 1995). Similarly, the Mountain Areas Conservancy

Project, closed in 2012, acknowledged the importance of women in biodiversity conservation and their localised knowledge. It established local conservancy management committees and ensured that women's organisations were included in all conservation planning (GEF 2022).

More recently, the 'Sustainable forest management to secure multiple benefits in Pakistan's high conservation value forests' project, concluded in 2019, provided forest management training to 200 community members, 10% of whom were women, along with training in technical and community organisational skills for sustainable resource use to 100 forest owners, of which 10% were women. The project helped to increase the household income of 20% of beneficiaries, 30% of whom were women, through the sale of forest and non-forest resources in community managed conservation areas (UNDP 2020b).

Some biodiversity protection and wildlife conservation projects include women in project activities and in decision making. The Strengthening Community-Managed Protected Areas for Conserving Biodiversity and Improving Local Livelihoods project is expected to benefit 2,000 people (of which at least 40% will be women) through involvement in project implementation or as recipients of project support. This includes project staff, government officials, community wildlife guards and tourist guides. The project also aims to encourage microfinance banks and other financial institutions to facilitate access to loans and financial assistance to women led enterprises, especially local handicrafts (GEF 2020).

The Pakistan Snow Leopard and Ecosystem Protection Programme, concluded in 2018, conducted a socioeconomic and environmental context assessment to mitigate possible negative consequences to local populations, particularly women. It sought to involve women in project activities related to land use planning, the use of incentive mechanisms and community capacity development (UNDP 2022b).

Action Plan: Forests and Biodiversity

Outcome: Pakistan's forests and biodiversity are safeguarded and protected against climate change impacts and restored through gender responsive policies, programmes and practices

Activity	Lead actors	Indicators of success
Objective: Ensure the inclusion of women, particularly those from vulnerable communities, in all policy, planning and decision making		
Establish requirements for the inclusion of women in all forest and biodiversity policy making and planning bodies at the national and provincial level	MOCC, provincial forest and wildlife departments	Increased number of women included in forest and biodiversity policy and decision making Number of women employees at MOCC, provincial departments
Set up a task force to advocate for and monitor women's participation in forest and biodiversity policy, management and decision making, with additional task forces at the district level which include women's associations	NCSW, PCSWs	Task forces created Number of women who are members of national and provincial task forces
Objective: Strengthen and institutionalise gender mainstreaming in all policies and programmes for forestry and biodiversity, as well as within management authorities and bodies		
Appoint gender focal points for forestry and biodiversity management at the national and provincial levels	MOCC, provincial forest and wildlife departments	Gender focal points appointed
Review the legal framework governing forests and biodiversity to identify opportunities for legal amendments that can make laws more responsive to the needs of women	MOCC, IUCNP	Law review published Number of amendments proposed Number of laws amended
Review existing policies to identify gaps in gender responsiveness and recommend revisions to make policies more inclusive	MOCC, IUCNP	Policy review published Number of reform proposals submitted

Activity	Lead actors	Indicators of success
Conduct a gender assessment of ongoing initiatives in the forests and biodiversity sectors to determine the extent to which these initiatives are responsive to the needs of women	MOCC, IUCNP, research institutions	Number of policies revised Gender assessment published
Hold policy dialogues with parliamentarians on gender equity in forestry and biodiversity management and use in the context of climate change challenges	MOCC, NCSW, Women's Parliamentary Caucus	Number of policy dialogues held
Ensure that legislation governing forests and biodiversity includes provisions that allow for women's participation in decision making and implementation	PCSWs, Provincial Women's Parliamentary Caucuses	Amendment of laws to ensure participation of women in decision making and implementation
Provide technical and financial support to women's organisations, CBOs and joint forest management committees to engage in legal processes related to forestry and biodiversity	MOCC, NCSW, Women's Parliamentary Caucus	Number of organisations participating in legal processes related to forestry and biodiversity
Objective: Build stakeholder capacity on linkages to gender in programmes for forestry and biodiversity		
Build the capacity of national and provincial institutions focusing on the links between gender, climate change and natural resource management to strengthen understanding of the differential impacts of climate change on women engaged in forestry and natural resource use	MOCC, provincial forest and wildlife departments, research institutions	Number of research projects developed with gender aspects included

Activity	Lead actors	Indicators of success
Conduct capacity building sessions targeting all relevant stakeholders on the impact of climate change on women's involvement in forestry and biodiversity use and conservation	MOCC, provincial forest and wildlife departments	Number of capacity building sessions conducted Number of attendees Attendee survey reports (learning from sessions)
Conduct awareness raising and training workshops on the linkages between gender, forestry and biodiversity, and climate challenges	MOCC, federal and provincial ministries and departments	Number of workshops conducted
Develop training programmes employing climate adaptation tools and techniques for improved forest and resource management and conservation	Provincial ministries and departments, NGOs, CSOs	Number of training programmes developed Number of women trained Number of adaptation tools and techniques introduced at the community level
Support the establishment of women's groups at the local level to provide ongoing training and technical support for climate resilient forestry and natural resource use	Provincial forest and wildlife departments, district authorities, CSOs	Number of women's groups established
Establish networks for knowledge sharing on best practices, and to advocate for local level climate issues and the needs of women involved in forestry and natural resource use	Provincial forest and wildlife departments, district authorities, CSOs	Number of knowledge sharing and advocacy groups established
Objective: Facilitate and empower women engaged in forestry and natural resource use		
Create incentives for women to pursue opportunities in forestry and biodiversity management by providing scholarships and other support to acquire the necessary skills and training	MOCC, Higher Education Commission (HEC), research institutions	Number of scholarships awarded to women Number of women pursuing higher education in forestry, biodiversity conservation

Activity	Lead actors	Indicators of success
Develop climate smart business and startup opportunities for women in forestry, non-timber forest products and natural resource use	MOCC, private sector, incubators	Number of climate smart businesses and startups launched
Ensure that financing is available for women seeking to pursue or expand climate smart businesses related to forestry, non-timber forest products and natural resource use	Commercial banks, microfinance institutions	Number of finance schemes launched Number of women able to access finance Amount of financing provided (PKR)
Train women in climate smart tools and techniques for improved forest and resource management and use	Provincial ministries and departments, NGOs, CSOs	Number of women trained Number of climate smart tools and technologies introduced
Train women in community level forest and resource management, particularly as forest rangers and wildlife protection officers	Provincial forest and wildlife departments, district authorities	Number of women trained Number of women recruited as forest rangers and wildlife protection officers
Promote women's entrepreneurship in forestry and non-timber forest products by removing bottlenecks and providing financial and other incentives, such as business incubation and mentoring programmes	MOCC, federal and provincial ministries and departments, tech incubators, chambers of commerce	Number of women setting up new businesses in the energy and transport sectors
Objective: Collect and make accessible gender disaggregated data on forests and biodiversity to identify and understand women's needs and priorities		
Ensure that gender disaggregated data is available for all aspects of women's involvement in forest and biodiversity management and use	MOCC, PBS	Number of gender disaggregated datasets developed and made available

Activity	Lead actors	Indicators of success
Document and disseminate examples and success stories on women's participation in forest and biodiversity management and use to influence policy makers and showcase the role of women	MOCC, research institutions	Number of success stories published
Conduct assessments and studies to build knowledge on women's changing role in forestry and biodiversity management and use in the context of climate change	MOCC, research institutions	Number of studies published
Conduct assessments and studies to build knowledge on women's role in climate adaptation and climate smart practices in forest and biodiversity management and use	MOCC, research institutions	Number of studies published
Objective: Monitor and evaluate ccGAP implementation to strengthen gender responsive action for forests and biodiversity		
Develop benchmarks and indicators to monitor progress on implementation of gender sensitive actions in forest and biodiversity management	MOCC	Monitoring framework developed Baseline data collected
Establish a mechanism for periodic review of progress on ccGAP implementation	MOCC, IUCNP	Mechanism established Progress reports published



4 Integrated Coastal Management

Although fisheries make a relatively modest contribution to the national income, accounting for less than 0.4% of GDP, the marine sector is a significant source of livelihood for communities living along the coasts of Balochistan and Sindh (WB 2018b). Nearly 80% of the coastal population is engaged in fisheries related activities (MFF 2016). Close to 400,000 people are directly employed in the fisheries sector, with another 1.4 million estimated to be employed in secondary jobs such as processing, transport and retail.

Healthy coastal ecosystems not only support local livelihoods but are essential to tackle the effects of climate change. The capacity of mangroves for carbon sequestration is three to four times that of other trees (Nyanga 2020). Mangrove forests help to keep creeks and water channels clean by acting as a buffer against sea intrusion and soil erosion. They also provide a natural barrier against the impacts of cyclones and tsunamis, a reality brought home with devastating consequences in the wake of the 2004 Indian Ocean tsunami.

While many rural communities are vulnerable to the effects of climate change, fishing communities are particularly at risk (WB 2018b). Pakistan's marine fisheries are depleted and overfished, reducing yields even as fishing effort has increased. Costs are increasing as well, undermining the sector's profitability and affecting the livelihoods of small fishing communities. Over the last five years, the income of small fishers has fallen dramatically as a result of overfishing by large commercial operators, including the use of large trawlers and illegal nets. At the same time, the degradation of mangrove forests means that fish stocks are not regenerating adequately (MFF 2019).

The vulnerability of fishing communities is compounded by the fact that climate change is

putting stress on fisheries globally. In Pakistan, this has forced households depending on fishing to adopt adaptation strategies such as migration or seeking employment in other sectors. The burden of adaptation is greater on women, who face barriers to employment and must take on additional responsibilities at home following the migration of men (Shirkat Gah 2014).

Among Pakistan's coastal communities, women's roles and responsibilities are more or less similar. They are generally involved in ancillary tasks related to fisheries, such as collecting crabs and clams from mangrove forests, along with work in fish processing and packaging (MFF 2019).

Fishing has traditionally been a male activity, with men dominating all stages of the value chain from

Policy context

The **National Climate Change Policy (2021)** seeks to maintain marine ecosystems and fish habitats for a "healthy fisheries sector" (GOP 2021a). The policy proposes actions such as regenerating mangroves, ensuring water flow for healthy rivers, reducing water pollution and promoting aquaculture. The policy does not mention the role of women in the fisheries sector.

The **Integrated Coastal Zone Management Plan for Pakistan (2011)** proposes training and microcredit schemes for women in coastal areas to allow them to start small industries (IUCN 2011).

Pakistan has committed to implement the **FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2015)**. The guidelines call for increasing women's visibility and participation across the value chain (FAO 2015b). Key actions in the guidelines are as follows:

- Conduct a baseline study to better understand the role of women in fisheries and aquaculture, including key actors and specific vulnerabilities
- Collect and make available gender disaggregated data
- Mainstream gender across fisheries policies and programmes
- Strengthen local and community institutions and support them to adopt inclusive and gender responsive approaches to resource management, access rights and opportunities
- Address the gender pay gap and the differences in employment opportunities for women and men, addressing unequal and unfair employment practices and encouraging the provision of benefits such as healthcare and maternity leave.

A **National Fisheries and Aquaculture Development Policy and Plan of Action for 2020-30** is under development. The policy aims to support sustainable management and use of fisheries and aquaculture resources (*Dawn* 2020a).

Coastal profile

Pakistan's coastline stretches for about 990 km, from the Iran border at Gwadar Bay in the west to the Indian border at Sir Creek in the east. Some 720 km of coastline falls in the province of Balochistan and 270 km in Sindh. Broadly speaking, the coastal region can be divided into five parts, corresponding to administrative districts: Gwadar and Lasbela in Balochistan; and Karachi, Thatta (from Korangi Creek to the Indian border at Sir Creek) and the Rann of Kutch (Badin to Tharparkar) in Sindh (MFF 2016). The country's coasts are made up of tidal creeks, mudflats and mangroves.

gear preparation and the repair of nets to fishing and post-harvest activities. More recently, however, women have begun to take up new roles in the fishing economy. For example, women are now important actors in small scale operations. In the pre-harvest stages, women repair fishing gear and prepare aquaculture ponds, and some also participate in fishing (Shah 2020). In the post-harvest stages, women are involved in cleaning and processing as well as distribution.

Despite their essential role, women employed in the sector earn about one third of the wages paid to men for skilled work (WB 2018b). Women are also barred from pursuing income generating activities in the sector, lacking access to fishing sites, fishing quotas and licenses, as these are traditionally reserved for men (WB 2018b).

Official statistics on women's contribution to the sector are limited, making it difficult to formulate gender inclusive policies and interventions (WB 2018b). Administration of the sector has also been characterised by a lack of community participation, making it more difficult to identify and address women's needs (TCCR 2014).

Programmes and initiatives

The Sindh Coastal Community Development Project, concluded in 2013, established 1,500 women's community based organisations (CBOs) to implement small scale infrastructure schemes. Close to 25,000 women were trained in various skills, including leadership and CBO management, livestock extension, natural resource management, fish management, and vocational skills for income generation. The project supported a coastal development plan which

included provisions to improve the health and welfare of women in coastal communities (ADB 2014a).

Mangrove plantation projects along the Balochistan and Sindh coast have been a part of coastal management initiatives for many decades. Recent initiatives have made an effort to include women in plantation drives, including in setting up nurseries and conservation activities (TCCR n.d.).

There has not been much attention paid to developing initiatives aimed specifically at women in the fisheries sector. Small scale projects have trained men in responsible fishing practices, provided equipment and set up 'fisher groups', including separate groups for women (WWF 2021). These interventions include providing alternative livelihood opportunities for women through training in tailoring and candle making (WWF 2019).

Livelihood support and income generation projects have focused on training in fish processing. These include the Promoting Gender Equality for Decent Employment project, concluded in 2011, which provided skills training to women in fish processing (*Pakistan Today* 2011). Similarly, the Job Skills Training and Placement of Fishing Community People project conducted a capacity gap assessment of 100 members of fishing communities, including women, and provided training on fish grading, processing and packaging (TCCR n.d.). The private sector has also supported livelihood projects in fishing communities, providing training to women for income generation activities (Guriro 2016).

Action Plan: Integrated Coastal Management

Outcome: The coasts of Pakistan, and income generating activities associated with their management, are protected against climate change impacts and restored through gender responsive policies, programmes and practices

Activity	Lead actors	Indicators of success
Objective: Ensure the inclusion of women, particularly those from vulnerable communities, in all policy, planning and decision making		
Establish requirements for the inclusion of women in all coastal management policy making and planning bodies at the national and provincial level	MOCC, provincial fisheries and wildlife departments	<p>Increased number of women included in integrated coastal management policy and decision making</p> <p>Number of women employees at MOCC, provincial departments</p>
Support the establishment of local level women's groups in coastal communities to advocate for the needs and priorities of women involved in coastal resource management, and include their members in local decision making	Provincial fisheries and wildlife departments, district administrations	<p>Number of women's groups established in coastal communities</p> <p>Number of women participating in local level decision making bodies</p> <p>Number of local action plans developed with input from women</p>
Connect women's organisations at the national and provincial levels through the relevant government agencies and NGOs to discuss priority policy issues relating to gender equality in coastal and fisheries resources management	MOCC, provincial fisheries, wildlife and coastal management departments	<p>Number of priority policy issues identified</p> <p>Number of priority policy issues included in new or amended policies</p>
Conduct stakeholder dialogues to understand the needs of women in coastal communities to ensure that all policies relating to coastal and fisheries management include clear objectives and indicators relating to gender equality and women's empowerment	Provincial fisheries, wildlife and coastal management departments	<p>Number of dialogues conducted</p> <p>Number of policies developed or amended to include clear objectives and indicators</p>

Activity	Lead actors	Indicators of success
Objective: Strengthen and institutionalise gender mainstreaming in all policies and programmes for coastal management, as well as within management authorities and bodies		
Appoint gender focal points for fisheries and coastal management at the national and provincial levels	MOCC, provincial fisheries and wildlife departments	Gender focal points appointed
Review the legal framework governing fisheries and coastal management to identify opportunities for legal amendments that can make laws more responsive to the needs of women	MOCC, IUCNP	Law reviews published Number of amendments proposed Number of laws amended
Review existing policies and plans to identify gaps in gender responsiveness and recommend revisions to make policies more inclusive	MOCC, IUCNP	Policy review published Number of reform proposals submitted Number of policies revised
Conduct a gender assessment of ongoing initiatives in the fisheries and coastal management sectors to determine the extent to which these initiatives are responsive to the needs of women	MOCC, IUCNP, research institutions	Gender assessment published
Hold policy dialogues with provincial parliamentarians on gender equity in fisheries and coastal management in the context of climate change challenges	MOCC, PCSWs, Provincial Women's Parliamentary Caucuses	Number of policy dialogues held
Objective: Build stakeholder capacity on linkages to gender in programmes for integrated coastal management		
Build the capacity of institutions focusing on the links between gender, climate change and coastal management to strengthen understanding of the differential impacts of climate change on women engaged in the fisheries sector	MOCC, provincial fisheries and coastal development departments, research institutions	Number of research projects developed with gender aspects included

Activity	Lead actors	Indicators of success
Conduct capacity building sessions targeting all relevant stakeholders on the importance of women's involvement in fisheries and coastal management	MOCC, provincial fisheries and wildlife departments	Number of capacity building sessions conducted Number of attendees Attendee survey reports (learning from sessions)
Conduct awareness raising and training workshops on the linkages between gender, fisheries and coastal management, and climate challenges	MOCC, federal and provincial ministries and departments	Number of workshops conducted
Support the establishment of women's groups at the local level to provide ongoing training and technical support, for knowledge sharing on best practices, and to advocate for local level issues and needs of women involved in the fisheries and coastal management sectors	Provincial fisheries and wildlife departments, district authorities, CSOs	Number of women's groups established
Engage with local media to build understanding of women in coastal management and share messaging to further build the capacity of communities	Provincial fisheries and wildlife departments	Number of media campaigns launched
Objective: Facilitate and empower women engaged in fisheries and coastal management		
Create incentives for women to pursue opportunities in fisheries and coastal management by providing scholarships and other support to acquire the necessary skills and training	MOCC, HEC, research institutions	Number of scholarships awarded to women Number of women pursuing higher education in fisheries, coastal management
Engage with the business sector to raise the economic profile of women in coastal areas	Provincial fisheries and wildlife departments, provincial chambers of commerce	Number of women engaged across the fisheries business supply chain

Activity	Lead actors	Indicators of success
Ensure that financing is available for women seeking to pursue or expand businesses related to fisheries and coastal management	Commercial banks, microfinance institutions	Number of finance schemes launched Number of women able to access finance Amount of financing provided (PKR)
Provide technical skills and vocational training for women employed in fisheries and coastal management, focusing on adaptation to climate impacts and area specific local needs	Provincial fisheries and wildlife departments, district administrations, CSOs	Number of training programmes developed Number of women trained
Promote women's entrepreneurship in the fisheries sector by removing bottlenecks and providing financial and other incentives, such as tax breaks, business incubation and mentoring programmes	MOCC, federal and provincial ministries and departments, tech incubators, chambers of commerce	Number of women setting up new businesses in the fisheries and coastal management sectors
Objective: Collect and make accessible gender disaggregated data on fisheries and coastal management to identify and understand women's needs and priorities		
Ensure that gender disaggregated data is available for all aspects of women's involvement in fisheries and coastal management	MOCC, PBS	Number of gender disaggregated datasets developed and made available
Conduct assessments and studies to build knowledge on women's changing role in fisheries and coastal management in the context of climate change	MOCC, research institutions	Number of studies published
Carry out a comprehensive gender analysis of the fisheries and coastal management sector to identify gaps in gender inclusiveness and highlight opportunities to rectify the imbalance	Provincial fisheries and wildlife departments, research institutions	Gender analysis published

Activity	Lead actors	Indicators of success
Objective: Monitor and evaluate ccGAP implementation to strengthen gender responsive action for integrated coastal management		
Develop benchmarks and indicators to monitor progress on implementation of gender sensitive integrated coastal management actions	MOCC	Monitoring framework developed Baseline data collected
Establish a mechanism for periodic review of progress on ccGAP implementation	MOCC, IUCNP	Mechanism established Progress reports published





5 Water and Sanitation

Pakistan is one of the most water stressed countries in the world (Holden and Doshi 2019). This is of particular concern because Pakistan's economy relies heavily on agriculture, which provides employment to nearly half of the country's labour force (PBS 2022a). The sector uses the bulk of the country's water supply, with approximately 95% of surface water and almost all fresh groundwater diverted for agriculture (Hisaar Foundation 2016).

Freshwater resources in Pakistan depend on snowmelt, glacier melt and monsoon rains, all of which are highly sensitive to climate change. Climate projections for the country indicate that changing weather patterns will significantly affect the spatial and temporal distribution and availability of water in the coming decades (Ali 2008).

Pakistan is also among the 10 countries in the world with the largest number of people without access to safe drinking water (WaterAid 2022a).

Most urban and rural water supply comes from groundwater, with over 50% of village households getting drinking water from handpumps (Cooper 2018). In saline groundwater areas, irrigation canals are the main source of municipal water (Cooper 2018). Disparities exist between rural and urban access to safe drinking water, and there are also differences between provinces. Poorer districts in the country are more likely to rely on handpumps, putting them at greater risk of exposure to contaminated water.

Climate change is already putting pressure on water resources, creating scarcity in many regions where supply was once abundant (UNESCO 2020). With changing weather patterns disrupting the replenishment of the water table and human pressures increasing demand, the country is expected to face extremely high water

stress in the future (Dormido 2019). This spells disaster for the economy as well as for human development. Energy generation, industrial production and economic growth will all be affected along with the livelihoods of millions. Water scarcity will also threaten food security, exacerbate conflict and potentially displace entire communities (Holden and Doshi 2019).

As with many other sectors where climate change affects women disproportionately, water scarcity has a direct and more severe impact on women. Around 65% of women are engaged in agriculture and land use (WB 2022b), activities that make a much needed contribution to household income particularly in low income rural communities. Water scarcity will jeopardise women's livelihoods and the wellbeing of their families (UNESCO 2020).

Policy context

The **National Climate Change Policy (2021)** recognises that water availability is linked to climate change, which has serious implications for Pakistan (GOP 2021a).

The **National Water Policy (2018)** acknowledges that Pakistan faces water scarcity, which poses a threat to food security. It calls for the rapid development and management of the country's water resources (GOP 2018c). Women are mentioned just once in the policy and only in the context of stakeholder participation for "domestic water supply and water hygiene" (Section 18.3). Despite women's involvement in and reliance on agricultural activities, the policy only takes into account their role as domestic water users (Kamal 2018).

The **Pakistan Approach to Total Sanitation (2011)** was developed in the wake of the 2010 floods that ravaged the country. It is a strategy to scale up sanitation programmes, particularly in rural areas to end open defecation (GOP 2011). The policy mentions women once, in the context of developing a "cadre of male and female activists" to discourage open defecation who can eventually become small entrepreneurs marketing sanitation services and products.

The **National Drinking Water Policy (2009)** aims to ensure women's participation in the planning, implementation and monitoring of water supply schemes. To address women's needs in the design and operation of water supply schemes, it states that women will be recruited in water supply related institutions. The participation of women councillors will be ensured in local level water related decision making (GOP 2009).

The **National Sanitation Policy (2006)** calls for providing public toilet facilities for women and ensuring implementation of sanitation related programmes to empower women. It also proposes inducting women councillors as master trainers for hygiene, health and sanitation (GOP 2006b).

Water as a human right

In 2010, the United Nations General Assembly explicitly recognised the human right to water and sanitation, acknowledging that clean drinking water and sanitation are essential to the realisation of all human rights (UNGA 2010). The Resolution called upon States and international organisations to provide financial resources, capacity building and technology transfer to support countries, particularly developing countries, in the provision of safe, clean, accessible and affordable drinking water and sanitation (UNGA 2010).

In most rural communities, women and girls are responsible for water collection for household use. Scarcity forces them to travel longer distances to fetch water, in some cases putting them at greater risk in terms of personal safety. The additional time required can pull girls out of school and leave women with fewer opportunities to earn an income (UNESCO 2020).

Women and girls experience inequalities in access to water and sanitation services as well (Adams et al. 2021). Lack of access to water creates shame and anxiety about toilet use and menstrual hygiene management, affecting girls' attendance in school and limiting the mobility of women (Wendland et al. 2015). Women and girls are also exposed disproportionately to the risk of waterborne disease (UNESCO 2020).

Programmes and initiatives

Various donors and agencies have been involved in water and sanitation projects across the country. Components aimed at women and girls focus on providing toilet facilities and improving education around menstrual hygiene. Women's role, if there is one, is to work as community mobilisers for education around water, sanitation and hygiene (WASH).

The Punjab Rural Sustainable Water Supply and Sanitation Project, launched in 2021, has developed a gender framework to strengthen women's role in the WASH sector. The project aims to train local women to carry out awareness raising for improved WASH practices within their communities (WB 2022c). Similarly, the Sanitation

for Millions project, which concludes in 2022, has provided sanitation facilities to more than 650,000 people, 52% of whom are women. It has also conducted activities to build awareness on menstrual hygiene, reaching around 50,000 girls (SuSanA 2022).

Other projects aim to provide water and sanitation facilities in schools, build toilets for girls, provide menstrual hygiene products, work with the education sector to include WASH and menstrual hygiene management in the curriculum, and train teachers (WaterAid 2022b, 2022c). A similar project in Balochistan aims to improve WASH behaviours, targeting 55,000 women, and to provide access to safe drinking, sanitation and hygiene facilities to around 4,500 girls in schools (BRSP 2022).

Previous projects in water and sanitation have done much the same work, providing clean drinking water and aiming to improve hygiene practices. The Safe Drinking Water and Hygiene Promotion project, concluded in 2010, trained 10,000 women volunteers, including in the use of water purification technology (USAID 2010). The Punjab Community Water Supply and Sanitation Sector Project, closed in 2007, included a 'Social Uplift and Poverty Eradication' component aimed at women, trained female councillors and health workers, and supported the establishment of 700 women led CBOs (ADB 2008). Similarly, the Water and Sanitation Extension Programme, which closed in 2001, trained women in sanitation and hygiene practices, worked in schools, and visited households to discuss health and hygiene (GWP 2022, DeVries 2003).

Action Plan: Water and Sanitation

Outcome: Access to safe and sustainable water and sanitation services is enhanced for all Pakistanis through gender responsive, climate smart policies, programmes and practices

Activity	Lead actors	Indicators of success
Objective: Ensure the inclusion of women, particularly those from vulnerable communities, in all policy, planning and decision making		
Establish requirements for the inclusion of women in all water and sanitation policy making and planning bodies at the national and provincial level	MOCC, provincial ministries and departments	Increased number of women included in water and sanitation policy and decision making Number of women employees in provincial departments
Support the establishment of local level women's groups to advocate for the needs and priorities of women with respect to water and sanitation, and include their members in local decision making	Provincial departments, district administrations, CSOs	Number of women's groups established Number of women participating in local level decision making bodies
Secure women's voices and representation in community level water use and management bodies, including but not limited to water user groups	Provincial departments, district administrations, CSOs	Number of gender responsive stakeholder consultations organised Number of women involved in water use and management bodies
Objective: Strengthen and institutionalise gender mainstreaming in all policies and programmes for water and sanitation, as well as within management authorities and bodies		
Appoint gender focal points for water and sanitation at the national and provincial levels	MOCC, provincial ministries and departments	Gender focal points appointed
Review the legal framework governing water and sanitation to identify opportunities for legal amendments that can make laws more responsive to the needs of women	MOCC, IUCNP	Law review published Number of amendments proposed Number of laws amended

Activity	Lead actors	Indicators of success
Review existing policies to identify gaps in gender responsiveness and recommend revisions to make policies more inclusive	MOCC, IUCNP	Policy review published Number of reform proposals submitted Number of policies revised
Conduct a gender assessment of ongoing initiatives in the water and sanitation sectors to determine the extent to which these initiatives are responsive to the needs of women	MOCC, SDGs Secretariat, IUCNP, research institutions	Gender assessment published
Hold policy dialogues with parliamentarians on gender equity in water and sanitation in the context of climate change challenges, including consultation meetings with relevant departments, with the aim of identifying opportunities for gender inclusion in existing implementation plans	MOCC, NCSW, Women's Parliamentary Caucus, CSOs	Number of policy dialogues held
Conduct exchange visits between provinces to enhance understanding of good practices on gender equality and WASH	MOCC, provincial water and sanitation authorities	Number of exchange visits organised
Objective: Build stakeholder capacity on linkages to gender in programmes for water and sanitation		
Provide training for all relevant stakeholders on the specific water and sanitation needs of women	MOCC, provincial ministries departments, NGOs, CSOs	Number of capacity building sessions conducted Number of attendees Attendee survey reports (learning from sessions)
Conduct awareness raising and training workshops on the linkages between gender, water and sanitation, and climate challenges	MOCC, federal and provincial ministries and departments	Number of workshops conducted

Activity	Lead actors	Indicators of success
Support the establishment of women's groups at the local level to provide ongoing training and technical support, for knowledge sharing on best practices, and to advocate for local level water and sanitation issues and needs of women	Provincial ministries departments, district authorities, CSOs	Number of women's groups established
Develop training programmes employing climate adaptation tools and techniques for improved water management and conservation	Provincial ministries and departments, NGOs, CSOs	Number of training programmes developed Number of women trained Number of adaptation tools and techniques introduced at the community level
Include sanitation and hygiene in school curricula	Provincial education departments	Number of training modules developed for schools
Objective: Facilitate and empower women on water and sanitation knowledge, tools and networks		
Address structural issues related to women's needs, such as the lack of toilets in offices, factories, places of work and public buildings	NCSW, PCSWs, federal and provincial ministries and departments	Number of toilet facilities for women built or allocated in offices, factories, places of work and public buildings
Ensure that toilets for women and girls are operational in all educational institutions	Federal and provincial education departments	Number of institutions with functioning toilets for women and girls
Train women in the use of climate adaptation tools and techniques for improved water management and conservation, specifically in water stressed areas	Provincial ministries and departments, NGOs, CSOs	Number of women trained Number of climate smart tools and technologies introduced
Objective: Collect and make accessible gender disaggregated data on water and sanitation to identify and understand women's needs and priorities		
Ensure that gender disaggregated data is available for all aspects of water and sanitation	MOCC, PBS	Number of gender disaggregated datasets developed and made available

Activity	Lead actors	Indicators of success
Conduct assessments, surveys and studies to build knowledge on women's changing role in water management and use in the context of climate change	MOCC, research institutions	Number of studies published
Carry out a comprehensive gender analysis of the water and sanitation sector to identify gaps in gender inclusiveness and highlight opportunities to rectify the imbalance	Provincial water and sanitation departments, research institutions	Gender analysis published
Conduct local level consultations with women to identify area specific issues, needs and priorities	NCSW, PCSWs, CSOs	Number of consultations held
Establish a data collection cell to collect gender disaggregated data on water and sanitation	Ministry of Planning, Development and Special Initiatives (MOPDSI)	Data collection cell established
Use the Gender with Age Marker (GAM) tool for gender related data at the programme planning stage	MOPDSI	GAM tool applied to water conservation and sanitation projects
Objective: Monitor and evaluate ccGAP implementation to strengthen gender responsive action for water and sanitation		
Develop benchmarks and indicators to monitor progress on implementation of gender sensitive actions in water and sanitation	MOCC	Monitoring framework developed Baseline data collected
Establish a mechanism for periodic review of progress on ccGAP implementation	MOCC, IUCNP	Mechanism established Progress reports published



6 Energy and Transport

Energy and transport are critically important sectors of the economy, essential for economic growth and human development. They are also sectors that together generate more than 26% of the country's GHG emissions (Ritchie et al. 2020). Climate smart approaches are essential in these sectors but it is equally important to ensure that solutions take into account the needs of women and girls.

Energy

About 54 million people (26% of the population) lack access to electricity and 106 million (51%) lack access to clean cooking facilities (PBS 2022b). This limits household level income generating activities, particularly in rural areas. As the prices of oil and gas rise, this further affects access to energy and fuel for low income households.

Gender and energy intersect in complex ways. In developing countries, women and children in rural communities spend significant time gathering fuel (wood, charcoal, dung and agricultural waste). The type of fuel used affects the health of women and girls. Across the world, around 2.6 billion people cook on open fires or stoves burning kerosene, biomass (wood, animal dung and crop waste) and coal (WHO 2021). Each year close to 4 million people, mostly women and children, die prematurely from illness attributable to household air pollution caused by inefficient cooking practices and the use of polluting stoves (WHO 2021).

The traditional energy paradigm (biomass to fossil fuels) does not address the energy needs of women, as the focus is on increasing efficiency in the electricity sector and reducing subsidies on fossil fuels. Energy access is viewed as an issue of supply (availability of energy sources) or technology (use/distribution), with women's needs remaining invisible and on the periphery of energy policy.

These issues arise partly because women are excluded from policy development, management and decision making for the sector. Women make up only about 4% of the total staff of eight power utilities (public and private distribution, transmission and generation companies) and only 5% of employees in technical positions (WB 2018a). This is linked to the fact that women are underrepresented in STEM education. For example, women's enrolment in energy related engineering courses is only 28% (ADB 2021). But

social norms also have a part to play. In many communities, women's mobility is restricted, making it difficult for them to seek education and training (UNDP 2007).

In the absence of women in energy planning, it is less likely that their needs will be taken into account. Although government departments are expected to undertake gender responsive planning and budgeting, most policymakers do not know how to integrate gender in their policy. There is a considerable gap between existing knowledge about the links between energy and gender, and the implementation of this knowledge in energy policy and budgets. Gender disaggregated data on energy consumption is urgently required to design measures that improve women's participation in energy related fields of work and to help to integrate women's priorities into energy policies.

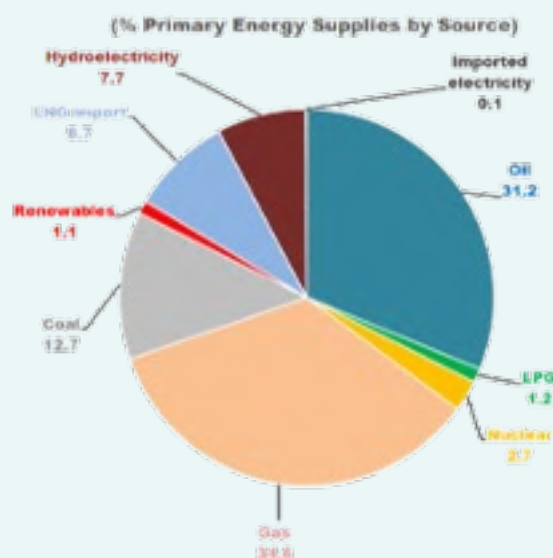
Energy profile

Pakistan relies heavily on fossil fuels. From the 1970s, natural gas has been the primary fuel, accounting for approximately 50% of the country's energy mix until 2005. Since then, gas production plateaued and imported oil began to fill a greater share of energy demand. More recently, coal and liquefied natural gas (LNG) imports have offset the decreasing share of local gas. In 2017-18, indigenous gas made up about 35% of Pakistan's total primary energy supply, while oil accounted for 31% (PBS 2018).

In 2013, following widespread power and gas shortages, the government invested heavily in energy infrastructure, adding 10 GW in new power generation capacity (including about 2 GW of coal) and commissioning LNG importing infrastructure with a capacity of 1.3 billion cubic feet per day. In 2017-18, power generation consumed almost 37% of the primary energy supplies.

Pakistan now faces structural challenges in the energy sector. It needs to improve energy security by reducing the share of imported fuels and lowering the cost of energy. Other challenges include centralised governance, intermittency of supply and the limited share of renewables. The lack of an integrated energy policy has led to a disconnect between top-down regulation of (on-grid) urban electrification and bottom-up (off-grid) rural initiatives that remain limited and unregulated. Issues of affordability, reliability and sustainability persist (Khalid and Malik 2021).

Pakistan's total energy supplies 2017-18



Policy context

Pakistan has a number of policies governing the energy sector. These include the National Energy Policy (2021), the National Energy Efficiency and Conservation Authority Strategic Plan 2020-25, the National Electric Vehicle Policy (2019), and the Alternative and Renewable Energy Policy (2019) (GOP 2019). Earlier policies for the sector include the National Energy Conservation Policy (2006) and the Energy Security Action Plan (2005-2030), approved in 2005.

These policies are gender blind and do not consider the different ways in which men and women access and use energy. For example, the Alternative and Renewable Energy Policy, which aims to boost the share of electricity generated from renewable sources from around 5% to 20% by 2025 and 30% by 2030, makes no mention of gender mainstreaming or women (GOP 2019).

Significant gaps also exist in Pakistan's SDG National Framework (GOP 2018e), including the lack of baseline data and clear targets, and with no attention paid to the intersection between SDG5 (gender equality) and SDG7 (energy access) (Khalid and Malik (2021).

The **National Energy Conservation Policy (2006)** includes guidelines and actions to enhance efficiency in various sectors of the economy (GOP 2006a). It is the only policy governing the energy sector that takes gender considerations into account in a substantive manner, making it one of its four goals: "Gender mainstreaming, with the rationale that energy conservation, especially integrated into rural development policies, will contribute to gender mainstreaming and recognition of women's role in the rural development context and in local communities" (GOP 2006a). The policy recognises the gender based division of tasks and responsibilities within the household, and notes that women have different energy needs than men, particularly in rural settings (GOP 2006a). The policy states:

- Energy conservation plays a vital role in gender mainstreaming particularly in the context of rural areas
- Integration of energy conservation into rural development policies with horizontal and vertical involvement of stakeholders can help gender mainstreaming
- Energy conservation efforts can create awareness at the community level about women's position in society and highlight issues related to recognition or acceptance on gender aspects related to energy and development
- Energy conservation efforts can result in focused interventions on drudgery reduction for women, on women specific needs and improving women's productivity in enterprises, and interventions related to improved access through efficient fuel and technology alternatives available locally.

The **Policy for Development of Renewable Energy for Power Generation (2006)** aims to increase the deployment of renewable energy technologies, provide additional power supplies to help meet increasing demand, introduce investment friendly incentives, and devise measures to support the private sector in mobilising, financing and enabling public sector investment in renewable energy projects (GOP 2006c). Women are mentioned once, under the strategic policy objectives section on social equity.

Programmes and initiatives

Most recent initiatives in the energy sector with a focus on women or girls have involved providing solar energy solutions for girls' schools or creating opportunities for women to set up small solar businesses. Other initiatives aim to address structural issues that hinder women's participation in the energy sector.

The Pakistan Solar Schools Project aims to provide off-grid solar power systems to around 1,200 schools in KP, more than 700 of which are girls' schools (UNOPS 2018). The project will also provide training to 4,000 members of parent-teacher councils for the operation and maintenance of these solar energy systems (UNOPS 2022). Similar projects have been launched in other parts of the country (see Chaudhry 2021, Gridworks 2021, Zakat Foundation 2022).

The Women In Energy Pakistan initiative aims to build a network for women in Pakistan's energy sector and foster a culture of career growth and leadership development. Its members are involved in various fields including clean energy, climate change, environment, green planning, and the mainstream power and energy sector. Activities include workshops on gender equality and energy access, and solar energy training for female engineers (Women in Energy Pakistan 2021).

The Building Capacities of Women in the Energy Sector in Pakistan project, which concludes in 2022, aims to enhance women's participation in the energy sector as employees, service providers, consumers and entrepreneurs. It has conducted a gender assessment to establish a baseline on women's participation in the sector and supports leadership training for women working in energy sector organisations. It also seeks to formulate a national gender mainstreaming policy for the sector (ADB 2022).

In the private sector, the Lighting a Million Lives project, now concluded, targeted women in remote rural areas. It provided solar lanterns to women to start small businesses and trained women on the operation of solar charging stations in their homes (Saeed 2015).

One opportunity is the recent introduction of net metering legislation for solar installations that allows consumers to sell power back to the national grid (AEDB n.d.). This could expedite the adoption of rooftop solar by homeowners and will help to bring electricity to remote villages, benefiting women. Not only will women have access to clean energy for domestic use, there are also opportunities for income generation.

Transport

Transport infrastructure has a direct impact on people's lives in both urban and rural areas. It affects the ability to earn a livelihood, to seek education, to access critical services like healthcare, and to participate in social and political activities. Here too the impact of poor quality transport services is greater on women and girls, and not just those who live in comparatively conservative communities.

The vast majority of women in Pakistan depend on public transport to work, study, visit family or access public services. They are more dependent on public transport than men because travel by other means, such as driving cars or motorbikes, is restricted (Sajjad et al. 2017). Women face significant challenges when it comes to using public transport not only in terms of access but also because of concerns over safety. Women using public transport regularly face harassment. In one study conducted in Karachi, 70% of women reported facing harassment either from another passenger (75%), the conductor (20%) or driver (5%) (ADB 2014b). Overall, 34% of women reported being touched or groped and 7% reported stalking. The situation in the rest of the country is likely to be similar. In response to harassment, women often restrict their use of public transport even when they are unable to afford other alternatives. They also restrict their travel after sunset, again because of safety concerns (Sajjad et al. 2017).

These issues impact every sphere of women's lives, affecting whether they are able to work, the kind of jobs they take, where they can study and when they can visit their families (Sajjad et al. 2017). They determine women's mobility decisions, the purpose of travel, and trip characteristics such as timing, mode choice and route selection. As a result, there are major gender differences in travel behaviour. Women are less mobile than men by every mode of travel and for almost every purpose of travel. On any given day, 55% of women are likely to stay at home,

compared to only 3% of men. On average, women make 50% fewer trips and have 46% shorter travel time compared to men (Adeel 2017). In fact, Pakistani women are nearly four times less mobile than men. Men account for approximately 80% of all trips taken and 79% of travel duration, while women only account for 20% of trips and 21% of travel duration.

There are gender differences in the mode of travel as well. Nearly 90% of trips in Pakistan are performed by walking. Women's share of walking trips is 2 percentage points higher than that of men (89% vs. 87%) (Adeel 2017). Women do not use bicycles and other modes of transport, which are used by men for 4% of trips. The share of women in non-motorised trips is 2 percentage points lower than men (89% vs. 91%). Among automobile-based trips, women's share of trips by household car and motorcycle is 1 percentage point higher than that of males (7% vs. 6%), whereas both genders have a similar share of public transport based trips (4%).

There are also gender differences in the purpose of travel. Participation in social and cultural activities, which includes travel related to sports, religious and recreational activities, is the most frequently reported purpose for travel. It accounts for nearly 44% of daily trips among men but only 29% of daily trips among women (Adeel 2017). The daily travel duration of men for these trips is 56% higher than that of women, indicating that men make frequent but shorter trips, while women make fewer but relatively longer trips.

Certain demographic indicators also affect mobility across genders. Male mobility increases with age and marriage, while among women it decreases with these life events. Personal income increases mobility across genders, while household income decreases female mobility. Women in car owning households make 53% of their daily trips using personal automobiles, which is 33% higher than their male counterparts and more than 10 times higher than men and women from the lowest income quintiles (Adeel 2017).

Transport profile

Pakistan is a rapidly urbanising country. While 36.44% of the population currently lives in urban areas, this is expected to reach 50% by 2050 (PBS 2022b). Urbanisation rates vary by province, with the largest percentage of urban residents in Sindh (51.89%) followed by Punjab (36.86%), Balochistan (27.62%) and KP (18.80%). Urbanisation in other territories is as follows: Islamabad Capital Territory 50.37%, FATA 2.80% (PBS 2022b).

With a growing urban population, demand for transport is increasing. Pakistanis travel nearly 400 billion passenger kilometres (pkm) each year and this is expected to rise to 1,000 billion pkm by 2030 (PBS 2017). In rural areas access to transport is poor, with only 53% of the rural population living within 2 km of an all-weather road (WB 2019).

Vehicle ownership: More than half of all Pakistani households (51.8%) own a motorcycle, 38% own a bicycle, and only 5.79% of households own a car, truck or jeep (PBS 2020).

The use of motorcycles is increasing among men for personal and family transport. Women rarely drive motorcycles, largely owing to cultural norms, and rely on male relatives to provide transport when using public transport is not feasible (Starkey et al. 2021).

Policy context

The **National Transport Policy (2018)** aims to provide “safe, affordable, efficient, durable, and environmentally friendly means of transport, ensuring reliable access to jobs, markets, education, and other services for all, irrespective of location, income, gender, age, race, or disability” (GOP 2018b). It notes that restricted mobility is a barrier for women in accessing key services and acknowledges that “providing opportunities for employment and empowerment of women demands that our transport system is safe, secure, accessible and inclusive”.

Principle 5 of the policy calls for transport sector projects to be “guided by the needs of end users”, where “special consideration will be given to the needs and priorities of vulnerable populations including the urban and rural poor, children and youth, elderly, women and disabled.” Stakeholder consultations and social surveys will be used to design and implement new projects and programmes to respond to user needs “as fully as possible.”

Objective 1 of the policy, ‘Improve connectivity and accessibility for all’, includes the sub-objective to: “Improve the accessibility to transport for women and vulnerable groups by identifying and removing any barriers hindering their access.”

The **Updated Nationally Determined Contributions (2021)** identify transport as one of the sectors with the greatest potential to cut emissions (GOP 2021b). A key recommendation is to promote mass transport in dense urban and high pollution areas, which is particularly relevant to the transport needs of women (GOP 2021b).

The **National Policy for Development and Women’s Empowerment (2002)** calls for “barrier-free transport access and convenient connectivity” for all, regardless of gender.

There are multiple factors that limit the mobility of women in Pakistan, many of which can be addressed by providing safe and reliable transport services catering to the needs of women and girls. Improving mobility for women and girls has knock-on effects in all areas of their lives, from education and employment to healthcare and recreation.

Programmes and initiatives

There have been various transport initiatives to address the needs of women, including interventions to facilitate mobility by creating safe physical spaces for women to travel (Sakura Women Bus Service in Mardan and Abbottabad, Pink Bus in Lahore, Zong-RTA Tabeer project), or projects aimed at changing norms around women's presence in public spaces (Decent Transport Project, Women on Wheels, Pink Rickshaws) (GOP 2020).

While such interventions do address women's needs, they serve only a small number of women and are yet to be replicated on a mass scale across the country. There are also limitations in terms of geographical coverage and operational

details. For example, the Lahore 'Pink Bus' project launched in 2012 introduced three women-only bus routes in the city (Sajjad et al. 2017). While the service allows women to travel without fear of harassment, it only makes two or three trips daily, closes by 3:00 PM and operates on routes where regular buses with separate sections for women also run from morning until evening. Other similar initiatives have been introduced without success, such as a women-only bus service in Islamabad and Rawalpindi which was launched in 2014 but shut down after a few months (*Dawn* 2020b). Similarly, the Women on Wheels initiative which provided subsidised motorcycles and driver training, trained 5,000 women in Punjab and distributed 800 subsidised motorcycles in that province, and trained another 500 women in Karachi (Salman Sufi Foundation 2020).

International agencies have attempted to address the problem of women's mobility in Pakistan, sponsoring research (PAL 2015) and organising innovations challenges to generate solutions (Salman and Bjoerge 2015). In the private sector, some innovative solutions are being attempted, such as app-based carpool services for women and children (SheKab 2022).

Action Plan: Energy and Transport

Outcome: Pakistan's energy and transport sectors address the needs of women and girls through gender responsive, climate smart policies, programmes and practices

Activity	Lead actors	Indicators of success
Objective: Ensure the inclusion of women, particularly those from vulnerable communities, in all policy, planning and decision making		
Establish requirements for the inclusion of women in all energy and transport policy making and planning bodies at the national and provincial level	MOCC, provincial ministries and departments	Increased number of women included in energy and transport policy and decision making Number of women employees in federal and provincial departments
Support the establishment of local level women's groups to advocate for the needs and priorities of women with respect to energy and transport, and include their members in local decision making	Provincial departments, district administrations, CSOs	Number of women's groups established Number of women participating in local level decision making bodies
Organise consultations with key stakeholders, ensuring participation of diverse women's groups, to identify the needs of women and girls and develop appropriate responses	NCSW, PCSWs	Number of consultations held Number of reform proposals developed
Design a portal carrying information on access to services and professional support (including attendance at conferences)	MOPDSI	Information portal developed and launched
Facilitate women's membership in professional networks (national, regional, international), including financial support to facilitate their participation in forums on renewable energy and transport	MOCC, NCSW	Number of women participating in networks and forums on renewable energy and transport

Activity	Lead actors	Indicators of success
Objective: Strengthen and institutionalise gender mainstreaming in all policies and programmes for energy and transport, as well as within management authorities and bodies		
Appoint gender focal points for energy and transport at the national and provincial levels	MOCC, federal and provincial ministries and departments	Gender focal points appointed
Review the legal framework governing the energy and transport sectors to identify opportunities for legal amendments that can make laws more responsive to the needs of women	MOCC, IUCNP	Law review published Number of amendments proposed Number of laws amended
Review existing policies to identify gaps in gender responsiveness and recommend revisions to make policies more inclusive	MOCC, IUCNP	Policy review published Number of reform proposals submitted Number of policies revised
Conduct a gender assessment of ongoing initiatives in the energy and transport sectors to determine the extent to which these initiatives are responsive to the needs of women	MOCC, IUCNP, research institutions	Gender assessment published
Hold policy dialogues with parliamentarians on gender equity in energy and transport in the context of climate change challenges	MOCC, NCSW, Women's Parliamentary Caucus	Number of policy dialogues held
Establish climate finance opportunities under the Green Climate Fund (GCF) for gender, energy and transport projects	MOCC	Number of energy and transport projects with a gender component presented to GCF or other donors
Establish a think tank with environmentalists and gender experts on energy and transport	MOCC, NCSW	Think tank established

Activity	Lead actors	Indicators of success
Objective: Build stakeholder capacity on linkages to gender in programmes for energy and transport		
Provide training for all relevant stakeholders on the specific energy and transport needs of women and girls	MOCC, provincial ministries and departments, NGOs, CSOs	Number of capacity building sessions conducted Number of attendees Attendee survey reports (learning from sessions)
Support the establishment of women's groups at the local level to provide ongoing training and technical support, for knowledge sharing on best practices, and to advocate for local level energy and transport issues and needs of women and girls	Provincial ministries and departments, district authorities, CSOs	Number of women's groups established
Conduct awareness raising and training workshops on the linkages between gender, energy and transport, and climate challenges	MOCC, federal and provincial ministries and departments	Number of workshops conducted
Identify industry leaders and conduct interviews with these role models to make their success stories publicly available, amplifying and promoting the role of women in climate smart energy solutions, and in developing safer and more convenient transport options for women and girls	NCSW, PCSWs, chambers of commerce, NGOs, CSOs	Success stories published
Design short videos in local languages that can be shared on social media (WhatsApp, Facebook, YouTube) on environment friendly and renewable energy technologies, and opportunities for women to join the sector	MOCC	Number of videos developed and disseminated

Activity	Lead actors	Indicators of success
Objective: Facilitate and empower women on climate smart energy knowledge and tools, and through improved access to transport		
Incentivise women to pursue educational and career opportunities in the energy and transport sectors by providing scholarships and other support to acquire the necessary qualifications and skills	MOCC, HEC, research institutions	Number of scholarships awarded to women Number of women pursuing higher education in energy and transport
Ensure that financing is available for women seeking to pursue or expand businesses related to renewable energy, and for safe transport options for women and girls	Commercial banks, microfinance institutions	Number of finance schemes launched Number of women able to access finance Amount of financing provided (PKR) Number of green startups registered by women
Capitalise on climate finance funds and opportunities under GCF to promote gender responsive energy and transport projects	MOCC	Number of donor programmes accessed Number of projects implemented
Provide technical skills and vocational training on climate smart transport and renewable energy solutions for women engaged in the energy and transport sectors, focusing on area specific local needs and women at the grassroots level	Provincial departments, district administrations, CSOs	Number of training programmes developed Number of women trained
Promote women's entrepreneurship in renewable energy and climate smart transport by removing bottlenecks and providing financial and other incentives, such as tax breaks, fast-track registration, business incubation and mentoring programmes	MOCC, federal and provincial ministries and departments, tech incubators, chambers of commerce	Number of women setting up new businesses in the energy and transport sectors

Activity	Lead actors	Indicators of success
Disseminate information in local languages on opportunities to access green technologies and support green startups, targeting women	MOCC, MOPDSI	Number of information products developed and disseminated
Pilot energy efficient low-cost cooking technologies, targeting women	Tech incubators, research institutions	Number of pilot projects launched Number of women beneficiaries
Set up a helpline for commuter issues related to public transport and compile gender disaggregated information on the types of complaints received	Provincial transport departments	Helpline established Gender disaggregated information compiled and made available on commuter issues
Objective: Collect and make accessible gender disaggregated data on energy and transport to identify and understand women's needs and priorities		
Collect gender disaggregated data for the energy and transport sectors to better understand women's use patterns and needs	PBS	Gender disaggregated data available for energy and transport
Conduct assessments and studies to build knowledge on women's changing role in energy use in the context of climate change	MOCC, research institutions	Number of studies published
Carry out a comprehensive gender analysis of the energy and transport sectors to identify gaps in gender inclusiveness and highlight opportunities to rectify the imbalance	Provincial fisheries and wildlife departments, research institutions	Gender analysis published
Conduct local level consultations with women to identify area specific issues, needs and priorities, and develop locally suitable renewable energy products compatible with local needs	NCSW, PCSWs, CSOs	Number of consultation sessions held

Activity	Lead actors	Indicators of success
Objective: Monitor and evaluate ccGAP implementation to strengthen gender responsive action for energy and transport		
Develop benchmarks and indicators to monitor progress on implementation of gender sensitive actions in energy and transport	MOCC, IUCNP	Monitoring framework developed
Establish a mechanism for periodic review of progress on ccGAP implementation	MOCC, IUCNP	Baseline data collected Mechanism established Progress reports published



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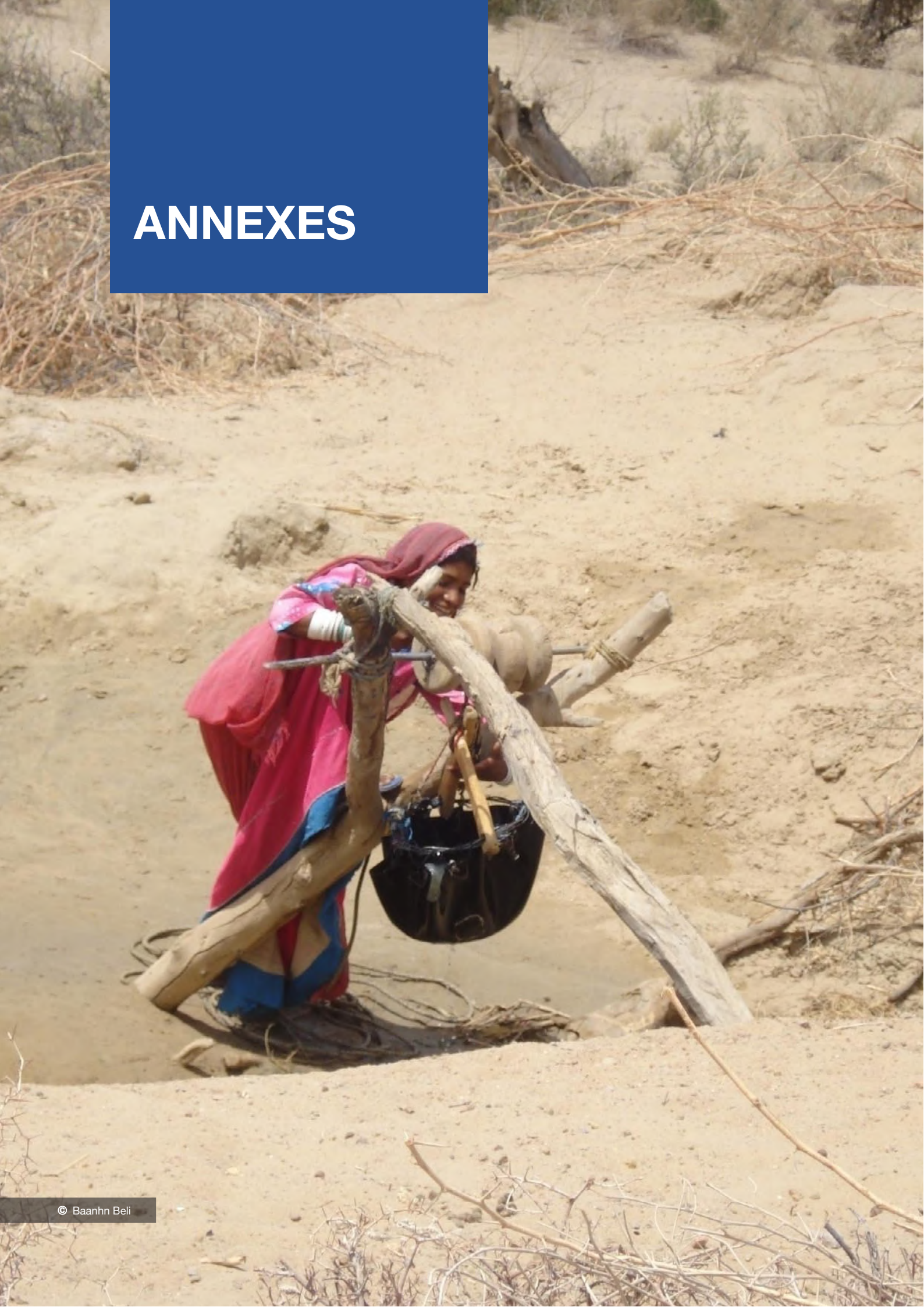
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ANNEXES



Annex 1: Alignment of ccGAP with national policy priorities

This Climate Change Gender Action Plan (ccGAP) is aligned with Pakistan's National Climate Change Policy (NCCP) and the Updated Nationally Determined Contributions (NDCs). The ccGAP aims to support the Government of Pakistan in its efforts to fulfil policy commitments set out in the NCCP and NDCs, suggesting priority actions and activities that can be implemented to address multiple policy goals simultaneously. The tables below map the alignment of the ccGAP with gender responsive policy measures set out in the NCCP and NDCs.

Alignment with the NCCP	
NCCP gender policy measures	ccGAP priority actions
Mainstream gender perspectives into climate change efforts at the national and regional levels	Strengthen coordination and institutionalisation to address gender issues and for improved gender mainstreaming
Take steps to reduce the vulnerability of women from climate change impacts, particularly in relation to their critical roles in rural areas in providing water, food and energy, and in livestock management	Enhance gender responsive climate actions through national and regional policies and programmes
Recognise and value women's contribution in the management and use of natural resources and other activities impacted by climate change	Invest in context specific research to inform more robust and gender responsive policymaking and programming
Undertake a comprehensive study of the gender differentiated impacts of climate change, with particular focus on gender differences in the capacity to cope with climate change adaptation strategies	Invest in context specific research to inform more robust and gender responsive policymaking and programming
Develop gender sensitive criteria and indicators related to vulnerability and adaptation, as gender differences in these areas are most crucial and most visible	Fill gender data and knowledge gaps across sectors
Develop and implement climate change vulnerability reduction measures that focus on women's needs and empower women's groups and networks	Increase the participation, representation and leadership of women at all levels of climate decision making and in all sectors

Alignment with the NCCP	
NCCP gender policy measures	ccGAP priority actions
Develop and implement climate change vulnerability reduction measures that focus on women's needs and empower women's groups and networks	Increase the participation, representation and leadership of women at all levels of climate decision making and in all sectors
Incorporate a role for women in the decision making process on climate change adaptation initiatives	Increase the participation, representation and leadership of women at all levels of climate decision making and in all sectors
Develop climate change adaptation measures based on local and indigenous knowledge particularly held by women	Invest in context specific research to inform more robust and gender responsive policymaking and programming
Adopt rules making it mandatory for all Ministry of Climate Change (MOCC) projects to take gender considerations into account	Strengthen coordination and institutionalisation to address gender issues and for improved gender mainstreaming
Increase the understanding of gender roles and responsibilities by applying a gender analysis to the project and programme planning cycle	Invest in context specific research to inform more robust and gender responsive policymaking and programming
Include gender responsive budgets and resource allocations in all projects and programmes	Strengthen coordination and institutionalisation to address gender issues and for improved gender mainstreaming
Review and amend relevant national policies to make them gender sensitive	Strengthen coordination and institutionalisation to address gender issues and for improved gender mainstreaming
Include gender and climate change into the school curriculum and in livestock management	Fill gender data and knowledge gaps across sectors

Alignment with the NDCs	
NDC priority activities	ccGAP actions
Disaster risk reduction	
Schemes developed for cash transfers and social pensions, particularly for disaster affected communities	Design and implement financial safety net systems to support vulnerable communities, including an appreciation for women-headed households impacted by disasters, including but not limited to cash transfers and insurance schemes. These schemes should include explicit criteria that focus on disaster-affected and prone areas and vulnerable groups, and the process of identifying beneficiaries must be transparent.
Advocacy/awareness at local level, including engaging print and electronic media, community radio for dissemination to improve women, girls and children's security	<p>Identify key stakeholders for sensitisation and training on the links between gender and climate disasters. These stakeholders can then serve as allies to advocate for women's participation in their community roles and spaces. Training can include inter-generational knowledge sharing at the community level to elevate indigenous knowledge.</p> <p>Work with the media to ensure media messaging includes gender perspectives (training of journalists to report on climate disasters from a gender perspective)</p> <p>Develop a communication campaign to build knowledge on gender and disasters, with inclusion of intergenerational knowledge. This campaign can use media, cellular networks, and radio and other communication tools.</p>
Include relevant issues in national curriculum and any other education materials	Work with educational and national institutions focusing on climate applied research to encourage understanding of how gender and social inclusion is linked, and guide generation of research that is inclusive and conducted in a gender responsive way to inform national level policy.
Sensitise men and mobilise them to serve as champions for preventing violence and assault	Identify key stakeholders for sensitisation and training on the links between disasters and gender-based violence. These stakeholders can then serve as allies to advocate for the protection of women and girls.
Provide alternative livelihood opportunities to disaster affected communities to manage forced migrations	Develop products and services for women to increase resilience and adapt to the impacts of climate induced disasters

NDC priority activities	ccGAP actions
	Design, introduce and implement disaster risk financing initiatives that are gender inclusive and cater to the needs of vulnerable groups
Undertake special programmes on income generating activities for women during and after disasters	Design and implement financial safety net systems to support women and women-headed households impacted by disasters, including but not limited to cash transfers and insurance schemes
Agriculture and food security	
<p>Increase women's participation:</p> <ul style="list-style-type: none"> ● Build capacity of women on drought resistant crop varieties, contemporary technologies, water efficient irrigation systems and novel farming practices ● Encourage the investment by women in animal production and bio-product industries to enhance job opportunities and minimise waste ● Ensure women's participation in protected areas management ● Promote non-timber forest production and services for micro-nutrients for the poor and particularly girls 	<p>Increase women's participation in decision making and implementation by:</p> <ul style="list-style-type: none"> ● Raising awareness about the importance of women's participation in decision making in natural resources management ● Conducting dialogues with women farmers and policy makers
	<p>Establish lobby groups to ensure women's voices are heard at all levels of government, in all relevant policies and decision making processes</p>
	<p>Develop and implement a gender-aware agricultural and livestock extension strategy to ensure women farmers know of and use available benefits</p>
	<p>Build the capacity of women on the adoption and use of technologies that are gender responsive, and address agricultural practices to adapt to climate change. This includes:</p> <ul style="list-style-type: none"> ● Providing women farmers with climate adaptive crop varieties, seeds and native plants resilient to local climate conditions ● Training women farmers on rainwater harvesting and efficient use of natural resources including water resources ● Providing women farmers and women headed households with drip irrigation, minimum tillage, zero tillage, solar water pumps and water storage facilities
	<p>Ensure availability of irrigation water and provide training in environmentally sustainable modes of irrigation, such as trickle irrigation, rainwater harvesting</p>

NDC priority activities	ccGAP actions
<p>Increase women's access to agricultural information through radio and mobiles</p>	<p>Arrange awareness, education and knowledge building programmes. Programmes would focus on training/capacity building for communities focused on climate change and impacts on local agriculture, and potential for preparation to address anticipated challenges. Media communication would focus on building learning on the connection between experienced agricultural changes to the environment in communities and scientific components of climate change, and understanding how different community members can be differentially impacted. This knowledge building would serve an additional purpose of generating interest in other capacity building activities linked to sustainable practices.</p>
<p>Introduce legal reform that:</p> <ul style="list-style-type: none"> ● Allow women farmers to buy or sell land ● Allow female farmers to access loans and finances ● Ensure that government incentives target women farmers ● Create a conducive environment for female farmers to sell their goods at farmers markets 	<p>Conduct a gender-specific local adaptation plan, with a focus on impacts of climate change on agriculture</p> <p>This plan would include findings from the vulnerability risk assessment, including information generated on resource access, to ensure activities encourage inclusive participation and are aware of gender differences in the roles associated with agriculture in communities</p> <p>Ensure active engagement of women in the design of the plan to ensure the plan is defined and designed using women's perspectives</p> <p>Assess how much land exists, how much is cultivable and can be utilised for distribution amongst women who are poor and vulnerable</p>
<p>Increase women's participation in decision making and implementation by</p> <ul style="list-style-type: none"> ● Raising awareness of whole rural community about importance of women's participation in decision making in natural resources management ● Promote women's participation in decision-making positions at local levels 	<p>Increase women's participation in decision making and implementation by:</p> <ul style="list-style-type: none"> ● Raising awareness of whole rural community about importance of women's participation in decision making in natural resources management ● Conduct dialogues with provisional and national women farmers with policy makers ● Establish lobby groups to ensure women's voices are heard at all levels of governance, in all relevant policies and decision making processes

NDC priority activities	ccGAP actions
<p>Increase women's participation in decision making and implementation</p> <ul style="list-style-type: none"> Assign a gender focal point for the national (inter-ministerial) level committee 	<p>Assign an Agriculture Gender Focal Point for the national (inter-ministerial) level committee</p>
<p>Revisit the national policies and legislation to ensure that gender and climate change are taken into consideration</p>	<p>Design and conduct a national level review, in partnership with associated ministries, focused on agriculture and food security national programmes and policies policy review with a gender and climate change lens</p> <p>This review would include consultative meetings with concerned stakeholders from associated ministries</p>
<p>Track indicators of women's nutrition by collecting data on women's nutritional status for informing governments about the nature, extent and consequences of climate change on female malnutrition</p>	<p>Conduct a national survey focused on gender inclusion analysis for all steps: climate impact assessment and adaptation actions in agriculture and food security</p> <p>Make analyses readily available for policymakers and practitioners through development of infographics, policy briefs and other educational materials/knowledge products</p>
Forests and biodiversity	
<p>Increase women's participation in decision making and implementation:</p> <ul style="list-style-type: none"> Raise awareness of whole rural community about importance of women's participation in decision making in natural resources management Promote women's participation in decision making positions at local levels 	<p>Identify an institution which can house a women's task force to advocate for and monitor how women's participation and empowerment is addressed at federal level on climate change, forestry and biodiversity policy making processes. Set up women's groups (task forces) at district and local level, to encourage women's associations and village development cooperation offices to share good practices on participation at provincial and community level. This will contribute to creating an enabling environment to support women's participation in decision making processes, including identifying and collaborating with lobbyists and advocates</p>
<p>Assign a gender focal point for the national (inter- ministerial) level committee</p>	<p>Assign a Forests and Biodiversity Gender Focal Point for the national (inter-ministerial) level committee</p>
<p>Revisit the national policies and legislation to ensure that gender and climate change are taken into consideration</p>	<p>Identify existing biodiversity policies and the gaps they may have with regards to addressing gender equality</p>

NDC priority activities	ccGAP actions
	Identify gaps where policies are silent on the value non-timber products have for women and propose options to secure women's benefits from natural resource management opportunities
Integrated coastal management	
The NDCs do not include specific activities and targets linking gender to integrated coastal management	
Water and sanitation	
Make local union level women's associations to keep water bodies (rivers, canals, lakes and wetlands) usable	Establish women's working groups, comprising NGOs and organisations working with women in communities, at the provincial and national levels tasked with direct work with the government
Capacity development of women to fully engage in water resource management, maintenance of water infrastructure, low water consuming crop technologies, water efficient technologies	Conduct community based gender responsive capacity building programmes that reflect solution oriented approaches
<p>Extension services on alternative irrigation technology (e.g. water purification, rainwater harvesting, wastewater collection, water conservation)</p> <p>Identification, documentation, and expansion of indigenous water management technology</p>	<p>Develop modules, techniques and innovative tools to train community on water management practices, and water conservation</p> <p>Develop modules, techniques and innovative tools to train community on water management practices, and water conservation</p>
Energy and transport	
Disseminate information on environment friendly and green technology regarding the positive impact of these technologies on the health of women	<p>Create YouTube channels for awareness campaigns on gender, energy and transport</p> <p>Conduct awareness raising and training workshops on the linkages between gender, energy and transport</p>
Train and create access for women to renewable alternative energy solutions	Travel grants/ membership grants for women to join policy consultations and professional networks in the renewable energy and transport sectors
Pilot energy efficient low-cost cooking technology projects	Provide technical skills and vocational training on renewable energy solutions, focusing on area specific local needs and women at the grassroots level

NDC priority activities	ccGAP actions
Soft loans for women to use green technology	Promote and support women entrepreneurs through loans
Provide green jobs in the energy sector for women by designating positions	Establish women entrepreneurship programmes and business incubation centres for green enterprises

Annex 2: Policy framework for climate action

International conventions and agreements

Convention on the Elimination of all Forms of Discrimination Against Women (1979)

Convention on Biological Diversity (1994)

United Nation Framework Convention on Climate Change (1994)

Beijing Declaration and Platform for Action (1998)

United Nations Millennium Development Goals (2000)

United Nations General Assembly Resolution 64/292, The Human Right to Water and Sanitation (2010)

Food and Agriculture Organization of the United Nations Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2015)

Paris Agreement to the United Nations Framework Convention on Climate Change (2015)

United Nations Sustainable Development Goals (2016)



National policies on ccGAP priority sectors

Climate change, environment, sustainable development

National Sustainable Development Strategy (2012)

Sustainable Development Goals (SDGs) National Framework (2018)

National Climate Change Policy (2021)

Updated Nationally Determined Contributions (2021)

Disaster risk reduction

Earthquake Reconstruction and Rehabilitation Authority Social Protection Strategy (2006)

National Disaster Risk Management Framework (2007)

National Disaster Management Plan (2012)

National Disaster Risk Reduction Policy (2013)

National Policy Guidelines on Vulnerable Groups in Disasters (2014)

Guidelines for Minimum Standards of Relief in Camp (2017)

National Disaster Response Plan (2019)

Agriculture and food security

National Food Security Policy (2018)

Forests and biodiversity

National Forest Policy (2015)

National Biodiversity Strategy and Action Plan (2017)

Integrated coastal management

Integrated Coastal Zone Management Plan for Pakistan (2011)

National Fisheries and Aquaculture Development Policy and Plan of Action (Draft 2020)

Water and sanitation

National Sanitation Policy (2006)

National Drinking Water Policy (2009)

Pakistan Approach to Total Sanitation (2011)

National Water Policy (2018)

Energy

Energy Security Action Plan (2005)

National Energy Conservation Policy (2006)

Policy for Development of Renewable Energy for Power Generation (2006)

Alternative and Renewable Energy Policy (2019)

National Electric Vehicle Policy (2019)

National Energy Efficiency and Conservation Authority Strategic Plan (2020)

National Energy Policy (2021)

Transport

National Transport Policy (2018)

Electric Vehicle and New Technology Policy (Draft 2020)

Annex 3: Legal and policy framework for the protection of women

Dissolution of Muslim Marriage Act (1939)
Muslim Family Laws Ordinance (1961)
Dowry and Bridal Gifts Act (Restriction) (1976)
Women in Distress and Detention Fund Act (1996)
National Policy for Development and Empowerment of Women (2002)
Protection of Women Act (2006)
Protection Against Harassment of Women at the Workplace Act (2010)
Acid Control and Acid Crime Prevention Act (2011)
Prevention of Anti-Women Practices (Criminal Law Amendment) Act (2011)
National Commission on the Status of Women Act (2012)
Criminal Law (Amendment) (Offense of Rape) Act (2016)
Prevention of Electronic Crimes Act (2016)
Hindu Marriage Act (2017)
Acid and Burn Crime Control Act (2018)
Sindh Women Agricultural Workers Act (2019)
Enforcement of Women's Property Rights Act (2020)
Pakistan Domestic Violence (Prevention and Protection) Act (2020)
Zainab Alert, Response and Recovery Act (2020)



