

# Policy Discourse Analysis – Pakistan

Supporting climate resilience  
in policy making

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SDPI, ISET-Pakistan and IIED

Country Report

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**Climate change**

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The work of the Climate Change Group focuses on achieving the following objectives:

- Supporting public planning processes in delivering climate resilient development outcomes for the poorest.
- Supporting climate change negotiators from poor and vulnerable countries for equitable, balanced and multilateral solutions to climate change.
- Building capacity to act on the implications of changing ecology and economics for equitable and climate resilient development in the drylands

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Policy Discourse Analyses (PDAs) draw on existing evidence and engage key stakeholders in a dialogue to review different policy arenas. IIED is undertaking case studies of countries participating in the PDAs and this report focuses on Pakistan, where a PDA was carried out to assess the extent to which climate resilience is factored into current policies and programmes. The report reviews recent developments in key policy areas relating to climate resilience, as well as the main discourses, policy objectives and stakeholders in key thematic areas to establish how climate risk management is being addressed. The report also identifies alternative discourses and evidence gaps to present opportunities and entry points for climate resilient development.

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# Summary

Climate change is an emerging challenge in Pakistan. It poses major threats to water, food and energy security. This is in addition to the increased pressure on the country's ability to reduce and manage environmental disasters. Pakistan has drafted a broad-based National Climate Change Policy and action plans addressing mitigation and adaptation are being developed.

Since the 1990s, Pakistan's development has been framed by financial support, policy frameworks for economic and fiscal stabilisation packaged as 'Poverty Reduction Strategies' by the International Monetary Fund (IMF) and the World Bank. Environmental concerns were expressed in the 7th Five Year Plan 'Sustainable Development and the Millennium Development Goals (MDGs)', in the Medium Term Development Framework (2005–10), Vision 2030 and the Poverty Reduction Strategy Papers (PRSPs). PRSP-1 in 2003 elaborated the implications of the environment-poverty nexus in Pakistan.

In 2007, a comprehensive policy blueprint entitled 'Pakistan in the 21st Century: Vision 2030' was prepared. Recent policy guidelines included in the 'Framework for Economic Growth' have been prepared by the Federal Planning Commission and approved by the National Economic Council. These are intended to guide the four provincial governments in elaborating their development plans. The Framework for Economic Growth (2011) refers to 'climate proofing development'. It recommends the allocation of financial and other resources for the implementation of the National Environment Policy and the related action plans on adaptation and mitigation currently being prepared.

Pakistan's efforts to achieve social, economic and environmental development have been severely constrained by a combination of unfavourable internal and external developments during the past five years (2006–2011). These include socio-political turmoil, militancy, military operations, natural disasters, especially the Great Flood in 2010, the impacts of the sharp increases in the prices of food and oil and the global economic recession (PMDGR 2010).

The Rio+20 Stocktaking Report concludes that 'the success of Pakistan's climate change-related mitigation and adaptation efforts ... depend on ... availability of financial resources, effective governance, technical know-how and technology, and international cooperation ... including multifaceted collaboration with adjacent countries.'

# Background

Policy Discourse Analyses (PDAs) were undertaken in five countries: Bangladesh, Pakistan, Afghanistan, India and Nepal. This report presents some of the findings from the Pakistan PDA which brought stakeholders together to discuss policy discourses relating to climate change.

The scope of the PDAs is to draw on existing evidence and to engage in key stakeholder consultations to:

- Identify key discourses in the country related to climate resilient landscapes and livelihoods
- Identify the main gatekeepers of the discourses
- Identify the evidence base on which the discourse is based or to which it responds
- Outline the policy, legislative and regulatory developments that support the identified discourses
- Assess the interaction between dominant discourses
- Outline the potential future trajectory of these discourses along with emerging policy windows.

This report presents findings from the Pakistan PDA. The PDA includes an assessment of the following policy arenas:

- Climate change risk management
- Agricultural innovation and food security
- Poverty reduction and social protection
- Ecosystem and natural resources management.

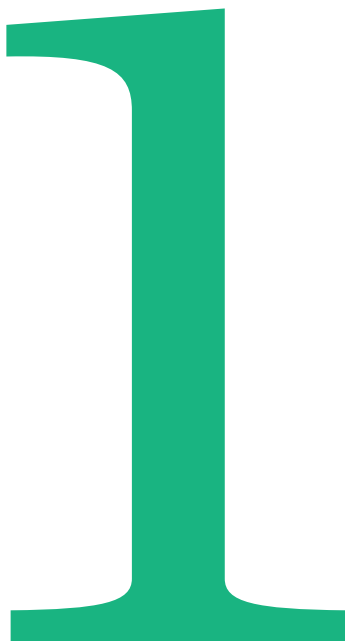
## Methodology

The PDA in Pakistan involved:

- A review of the recent developments in key policy areas related to climate resilience
- Key informant interviews with 20 stakeholders from government, civil society, academia, and research agencies. A full list of all interviewees is presented in Annex 1
- A literature review of published and grey policy and advocacy documents related to each of the themes.

# Introduction

This introductory section looks at how climate change has been addressed in Pakistan during the last decade and how policy discourse on climate change has progressed. It outlines some of the current policy and legislative bodies that are carrying out climate change research, notably the Global Change Impact Studies Centre, and discusses the formulation of a Draft Climate Change Policy in the context of a Framework for Economic Growth with a focus on the environment and climate change sector.





Pakistan is signatory to all 14 multilateral environment agreements and in 1995 the government created a Cabinet Committee for Climate. The relevant legislation and institutions put in place include the Pakistan Environmental Protection Act (PEPA) of 1997, the Pakistan Environmental Protection Council, the Federal Ministry of Environment, the National Environmental Protection Agency (NEPA), the Sustainable Development Boards, environmental laboratories and environmental tribunals at the provincial levels.

Policy discourse on climate change has gained momentum over the last decade. This can be appreciated from the steps set out below:

- In 2002, a research centre called the Global Change Impact Studies Centre (GCISC)<sup>1</sup> was established as a dedicated institution for climate change research and for providing assistance to the national planners and policy makers for strategic planning in the wake of climate change. This centre has since developed a corps of climate change scientists, which, besides conducting relevant research and policy analysis, is also helping in the capacity building of other relevant organisations;
- In 2003, Pakistan submitted its first national communication report to the United Nations Framework Convention on Climate Change (UNFCCC);
- In 2005, a high level body called the Prime Minister's Committee on Climate Change (PMCCC) was established as an overarching body for guidance on climate change issues at the national level;
- The Policy for Development of Renewable Energy for Power Generation was launched in 2006. One of the objectives was to address environmental and climate change. The Alternative Energy Development Board (AEDB) is tasked with implementing government policies and plans, developing projects, promoting local manufacturing, creating awareness and facilitating technology transfer, channelling international assistance, and coordinating all associated activities as the national facilitating agency for the development of renewable energy in the country. The policy and the establishment of the AEDB also fall within the purview of climate change discourse;
- In order to implement the Clean Development Mechanism (CDM) to generate carbon credits, the Prime Minister approved the Pakistan National Operational Strategy in 2006;
- The National Disaster Risk Management Framework (NDMRF) was made public in 2007 after endorsement by the government. It outlines the disaster management system and sets priorities. Climate

change is addressed as a cross-cutting issue and is reflected throughout the priorities;

- The National Disaster Management Authority (NDMA) was created in 2007. It is the apex federal entity for dealing with the entire spectrum of disaster risk management, which includes prevention, mitigation, preparedness, recovery and reconstruction. Climate change, as per the Framework on Disaster Risk Management (DRM), also falls within the purview of NDMA. NDMA was also member of the Task Force on Climate Change;
- In 2008, the Planning Commission set up a Task Force on Climate Change (PC-TFCC) to take stock of the national situation and make recommendations for a national climate change strategy. The PC-TFCC released its final report in February 2010;
- In September 2010, work was initiated on the formulation of a National Climate Change Policy (NCCP) and a National Climate Change Plan of Action (NCCPA) in the light of the TFCC recommendations. The draft of NCCP has been finalised and is in the process of formal governmental approval, while the work on drafting of the NCCPA is in the final stages;
- In June 2011, while a number of federal ministries including the Ministry of Environment (MoE), were devolved to provinces as a result of a constitutional amendment, the climate change related functions of the Ministry of Environment and GCISC were transferred to the Pakistan Planning Commission, thereby paving the way for better assimilation of climate change considerations into national development plans.

The Prime Minister's Committee on Climate Change was created in 2005 to look into policy challenges to national development posed by climate change. Different ministries are member of this Committee, including the Ministry of Water and Power, the Ministry Food and Agriculture, the Ministry of Science and Technology, and the Ministry of Environment. The Deputy Chairman of the Planning Commission and the Special Advisor to the Prime Minister also sit on the Committee. Parliament has also established a Committee on Environment and Climate Change but it has never been able to give any policy guidelines or initiate debate in parliament. Moreover, in 2009 when the Prime Minister nominated a special representative for the Copenhagen negotiations, this Committee was ignored.

<sup>1</sup> For details visit [www.gcisc.org.pk](http://www.gcisc.org.pk)

In November 2007, the Technical Advisory Panel (TAP) on Climate Change was constituted. The TAP had the following functions:

- Provide technical advisory services to the MoE on issues related to climate change including national position briefs for international negotiations (COPs, MOPs) under UNFCCC and the Kyoto Protocol;
- Identify, prioritise and recommend areas for conducting research, the results of which may be presented to and by the TAP, and assist in incorporating the research findings into policies;
- Review and carry out a technical screening of climate change project proposals prepared by MoE as and when requested;
- Work with other ministries and departments (e.g. Petroleum & Natural Resources, Forestry, Energy, Irrigation, Agriculture, Finance, Water & Power etc.) for cross-sectoral integration of climate change aspects in national policies, plans and programmes;
- Build linkages with regional organisations working on climate change to benefit from regional experiences and knowledge.

The TAP comprised of six regular members – namely the Ministry of Environment, the Global Change Impact Studies Centre, the Pakistan Agricultural Research Council, the Pakistan Meteorological Department, the Asia Pacific Network for Global Change Research and the International Union for the Conservation of Nature (IUCN) that acted as Secretariat (IUCN 2008).

According to PDA stakeholder interviews, the TAP functioned from the end of 2007 up to the end of 2008, at which point meetings of the panel were discontinued.

In 2007, as a part of its longer term scoping exercise, the Pakistan government developed Vision 2030. This was developed to conceptualise and chalk out a strategy for sustainable development in Pakistan. Vision 2030 explicitly mentions climate change both in relevant sectors and separately. The Vision suggests investing in environment friendly technologies and production and consumption systems. It stresses the need to conduct studies to better understand and to downscale climate change projections of impacts on Pakistan. Vision 2030 specifically recognises the need for new research on agriculture and for institutional arrangements, especially in rural areas, to cater for climate change challenges.

The current Medium Term Development Framework (MTDF) was formulated on the basis of Vision 2030. However, MTDF mentions climate change issues in the energy and agricultural sectors.

In 2008, the Task Force on Climate Change<sup>2</sup> was formulated by the Planning Commission of Pakistan and GCISC was the Secretariat. The Task Force became the main forum for policy discussion on climate change. It guided and facilitated Pakistan's delegations to international negotiations on climate change. The main function of the Task Force was to guide the process of climate change policy formulation in Pakistan.

In 2010, the National Economic and Environment Development Study (NEEDS) was conducted. This study focused largely on climate change mitigation and adaptation. In the adaptation section, the study looked into potential threats of climate change to Pakistan and suggested different ways of addressing these. The study also tried to monetise the cost of impacts to the national economy and to people's livelihoods.

The Task Force produced a report on the state of climate change impacts and through expert consultation generated policy recommendations taking a key economic sectors approach. After publication of the Task Force Report, it was dismantled and the Ministry of Environment established the Core Group on Climate Change. The Core Group was hosted in the Ministry of Environment and chaired by the Federal Minister of Environment. However, following devolution of the Ministry of Environment, the Core Group has been shifted to the Planning Commission of Pakistan under the chairmanship of the Prime Minister's Advisor on Climate Change and Development.

In 2010, the Ministry of Environment started work on a climate change policy in close consultation and guidance from the Core Group. The Draft Climate Change Policy was developed on the evidence and guidance provided by the Task Force Report.<sup>3</sup> The policy covered areas including coastal, agriculture, mountains, biodiversity, and water, etc. In 2011, the Ministry submitted the draft to the Core Group and gained approval, with some reservations, for presentation in Cabinet. At that time the Ministry of Environment was devolved and the draft policy is still without Cabinet's approval.

The Draft Climate Change Policy seeks to provide a 'comprehensive framework for the development of proposed adaptation and mitigation strategies and action plans'. It does this by: (a) setting a policy goal of ensuring that climate change is mainstreamed in the most economically important and vulnerable sectors of the economy and to steer Pakistan towards green economic growth; and by (b) adhering to the guiding principles of:

- Enhancing the capacity to address climate change
- Contributing towards meeting national growth objectives

<sup>2</sup> For details visit <http://planningcommission.gov.pk/taskforce.html>

<sup>3</sup> The draft policy was approved in September 2012. The Ministry of Environment was devolved to the provinces and a Ministry for Climate Change was formed at the Federal level. This Ministry has become a Division under the Cabinet Division in the current government.



Table 1: Pakistan Framework for Economic Growth – Environment and Climate Change Sector

<b>Theme 1</b>	Ensuring economic growth is sustainable and climate resilient (short-term). Protect economic growth from the risk, and associated economic cost, of climate induced natural disasters by mainstreaming risk reduction and management concerns within the government’s planning processes.
<b>Overall objective</b>	Allocate adequate financial and other resources to implement the NDMA’s ‘National Disaster Risk Management Framework’ and Medium Term Plan (2011-2015).
<b>Mandated agencies</b>	Planning Commission, Planning & Development Departments, Urban Unit, National Disaster Management Authority, Provincial Disaster Management Authorities, District Disaster Management Authorities, National Institute for Disaster Management.
<b>Theme 2</b>	‘Climate proof’ economic growth from the impacts of climate change, in particular on the agricultural, water and energy sectors (5 years).
<b>Overall objective</b>	Allocate adequate financial and other resources to implementing the adaptation measures in the government of Pakistan’s Climate Policy and accompanying Action Plan (upcoming).
<b>Mandated agencies</b>	Planning Commission, Ministry of Foreign Affairs.
<b>Theme 3</b>	Promote ‘green growth’ by attracting investment in low-carbon technologies (longer term, >5 years).
<b>Overall objective</b>	Allocate adequate financial and other resources to implementing the mitigation measures in the government of Pakistan’s Climate Policy and accompanying Action Plan (upcoming).
<b>Mandated agencies</b>	Planning Commission, National Disaster Management Authority, Provincial Disaster Management Authorities, National Institute for Disaster Management, Alternative Energy Development Board, Engineering Universities.

- Promoting conservation of resources and long-term sustainability
- Strengthening multi-sectoral and interdisciplinary linkages
- Being cost effective and efficient
- Promoting the use of appropriate technology
- Particularly addressing the needs of the poor and vulnerable
- Being consistent with international obligations and commitments.

Most of the national responsibilities and some staff of the Ministry of Environment have been passed to the Planning Commission of Pakistan. On 4 August 2011, notification was issued that pending work on the National Climate Change Policy and National Adaptation Programme of Action would start soon.

During 2011, the government of Pakistan formulated a new Framework for Economic Growth. The most recent version of the Framework includes an actions matrix for what is referred to as the environment and climate change sector. The main themes, objectives, measures and mandated agencies are set out in Table 1 above.

In order to understand how climate change is entering different arenas of policy discourse, the following sections look at key economic sectors, identify key actors and compare the ways in which different statements of policy perceive and address climate challenges. We start with climate risk management and then consider agricultural innovation and food security, poverty reduction and social protection, and finally ecosystems and natural resources management.

# Climate change risk management

This chapter looks at Pakistan's current programmes and policies relating to climate change and assesses findings from the policy discourse on climate risk management, presenting alternative discourses and evidence gaps, as well as opportunities and investments needed.



As mentioned in Chapter 1, the government of Pakistan established the Global Change Impact Studies Centre (GCISC) in 2002 for dedicated research on climate change. The main areas of research of GCISC are agriculture, water and glaciers. These areas are also very important for Pakistan's economy. GCISC has produced research work on the potential impacts of climate change on Pakistan.

From 2008, the Climate Change Task Force (see above) gave a new direction to in-country policy discourses. The Task Force looked into different challenges posed to Pakistan by climate change and gave a set of recommendations for each sector of the economy. Here we focus on coastal, agriculture and dryland areas.

The Task Force Report identified the following potential impacts of climate change on agriculture, food security and livestock:

- Water requirement will increase however, there would be less water available and timely availability of water would be another issue;
- Monsoon and rain patterns will change which will impact agriculture, livestock and food security, especially in arid areas;
- Water-related disasters will increase in number and intensity, intrusion of sea level, degradation of productive lands;
- Increased incident of pest and diseases;
- Low productivity of agriculture and livestock;
- These sectors have very low capacity to adapt due to old practice, technical backwardness and financial status.

For fisheries and coastal areas the Task Force Report identified the following challenges:

- Sea intrusion will impact the coastal areas. It will impact the ecosystem of coastal areas;
- Coastal communities will be impacted and there would be a serious threat to food security of coastal communities;
- Climate change will also impact on agriculture along coastal areas due to sea intrusion;
- Fish habitats will also be impacted and production and productivity of fish will decrease;
- There may be migration of fish species or extinction of species.

## Main discourse and policy objectives

In Chapter 1 the apparent coherence between the Draft Climate Change Policy and the Economic Growth Framework is shown. The draft policy seeks to mainstream climate change into the most important and vulnerable sectors of the economy towards achieving green economic growth, while the Growth Framework seeks to ensure that growth is sustainable, climate resilient and green.

The main objectives of Pakistan's Climate Change Policy are to:

- Assist the government in pursuing the paramount goal of sustained economic growth by appropriately addressing the challenges posed by the threat of climate change;
- Integrate climate change policy with other interrelated national policies, as the science of mitigation and adaptation to climate change involves many aspects of other social and economic sectors;
- Place equal emphasis on both mitigation and adaptation, as these are integral parts of the strategy to cope with climate change;
- Minimise the risks to the country's population and national economy arising from expected increase in frequency and intensity of extreme events: floods, droughts, tropical storms etc.;
- Contribute to the international effort to check climate change by controlling Pakistan's own emissions to the maximum extent feasible by shifting to a low carbon economy without compromising the energy needs for the country's socio-economic development or on the country's energy security considerations;
- Foster the strengthening of interministerial decision making and coordination mechanism on climate change;
- Improve knowledge and understanding of, and conduct systematic research and observation on climate change issues;
- Make full use of the new developments in science & technology to address effectively, both the mitigation and adaptation aspects of climate change;
- Foster capacity building of climate change relevant government organisations and other stakeholders at national and provincial level;
- Ensure water security, food security and energy security of the country in the face of challenges posed by climate change, by devising and implementing appropriate adaptation measures in the respective sectors;

- Facilitate the government in making effective use of the opportunities, particularly financial, available internationally;
- Help develop a mechanism that will enhance the understanding and awareness of climate change issues among all relevant stakeholders, including national planners and policymakers and the general public;
- Foster the development of appropriate economic incentives to encourage public and private sector investment in adaptation measures.
- To strengthen institutional capacity at national, provincial and local level
- To mainstream SLM into land use planning and develop a GIS based information system to monitor desertification
- Implementation of 9 pilot projects in Phase I and upscaling these in Phase II
- To document lesson learning and best practices in Sustainable Land Management to replicate in Phase II.

Project cost: PKR 238,800 million<sup>4</sup>

## Programmes

### Legislation and policy making on climate change in Pakistan

- Pakistan Environment Protection Act – 1997
- National Conservation Strategy – 1992
- National Environment Policy – 2005
- CDM Operational Strategy – 2005 (draft)
- Forest Policy – 2005
- Forestry Sector Master Plan
- National Environment Action Plan
- National Resettlement Policy
- Biodiversity Action Plan
- National Environment Quality Standards.

### Institutional development

The government of Pakistan has established the following research institutions/specialised cells to combat climate change issues in their respective areas:

- Global Change Impact Study Centre (GCISC)
- Climate Change/CDM Cell
- Ozone Cell
- Biodiversity Directorate.

A review of the government's project database identified two larger scale initiatives related to climate change and a number of sectoral projects:

### Sustainable land management to combat desertification in Pakistan (Phase I)

Project objectives:

- To create an enabling environment through policy reforms and mainstreaming the National Action Programme and Sustainable Land Management (SLM) principle

### Establishment of a Clean Development Mechanism (CDM) in the Ministry of Environment

Project objectives:

- To strengthen the CDM Cell in the Ministry of Environment
- To increase awareness of stakeholders and partners in CDM activities under the Kyoto Protocol of the UNFCCC
- To enhance the technical capacity of CDM staff and project proponents in development, implementation, monitoring and assessment of CDM projects in the country.

Project cost: PKR 38,935 Million

The sectors where climate change related projects were registered in 2007-2008 included: water & power (45); science & technological research (6); environment (18); interior, industries, production & special initiatives (1), and higher education (1).

### Main stakeholders

The Task Force Report and the Draft National Policy on Climate Change identified the stakeholders listed below:

Government Organisations (GOs):

- Ministry of Environment (MoE)
- Ministry of Food and Agriculture (MinFA)
- Ministry of Livestock and Dairy Development (MinLDD)
- Ministry of Water and Power (MoW&P)
- Ministry of Industries and Production (MoInd&P),
- Ministry of Science and Technology (MoST)
- Ministry of Foreign Affairs (MoFAff)
- Ministry of Health (MoH)
- Relevant provincial ministries and departments.

Research and data collection organisations:

- GCISC
- PMD
- Water & Power Development Authority (WAPDA)
- NIO
- National Agricultural Research Centre /Pakistan Agricultural Research Council (NARC /PARC)
- Space and Upper, Atmosphere Research Commission (SUPARCO)
- Pakistan Institute of Development Economics (PIDE)
- Pakistan Atomic Energy Commission (PAEC)
- COMSATS
- Institute of Information Technology (CIIT)
- National University of Computer and Emerging Sciences (FAST)
- Hydrocarbon Development Institute of Pakistan (HDIP)
- Pakistan Forest Institute (PFI).

### Climate risk management discourse

As can be seen from the reference to climate change in the Growth Framework and from other secondary material, the recent and current severe flooding in Pakistan has led to key stakeholders relating the increased frequency and severity of extreme weather events to possible climate change causes. In interviews with GCISC staff there was evidence presented of these effects from weather stations and observations. Similarly, the climate change advisers to government we interviewed also put much emphasis in building a climate change discourse closely related to disaster management.

The overall objectives for the environment and climate change sector in the Growth Framework have been stated earlier. In a sense these sets of objectives are reciprocal, i.e. mainstreaming climate change into sectors and climate proofing economic resources to maintain productivity. The Growth Framework also mentions making resources available for adaptation, although the overriding logic of the framework is that growth will reduce poverty and by inference adaptation needs to protect growth. A greater livelihoods emphasis in the growth strategy would have led to greater emphasis on adaptation by the climate vulnerable poor themselves rather than in the sectors they might be involved in.

### Alternative discourses and evidence gaps

Further work is required to properly reveal the full range of discourses of the civil society actors in Pakistan and the representatives of the climate vulnerable poor as regards interventions that address climate change.

The recent Oxfam assessment (Oxfam, 2011) of how well Pakistan is now prepared for further extreme weather events concluded three relevant issues to this scoping study:

- The floods have demonstrated a vital need to re-examine the underlying drivers of vulnerability that turn natural hazards into human disasters and hamper swift recovery. These include widespread malnutrition, deep levels of poverty, inadequate access to education, landlessness, discrimination against women and minorities, and conflict dynamics that hinder humanitarian access to certain populations.;
- Resilient communities struggling to recover are now facing the likelihood of yet more disasters in the future as climate change increases the prevalence of extreme weather conditions;
- Pakistan is simply not sufficiently prepared to cope. All public development policies should now systematically integrate Disaster Risk Reduction (DRR) and climate change adaptation principles to adequately meet the challenges of the changing environment.

A key recommendation from the Oxfam report is that the government of Pakistan should show long-term vision by ensuring that reconstruction and development plans prioritise DRR and climate change adaptation, and by putting the needs of the most vulnerable communities, particularly those of women, at the heart of these. Investment in sustainable livelihoods and local economies will help achieve this goal.

### Opportunities

- Evaluate the contribution of climate resilience interventions in terms of their contributions to inclusive economic growth;
- The reciprocal is also true. There is the opportunity/need to assess economic growth oriented interventions for their contributions to the climate resilience of the poor and the ecosystems these people depend upon;
- Testing the implementation at scale of climate smart disaster risk reduction.

<sup>4</sup> PKR 1,000 = US\$ 9.31

# Agricultural innovation and food security

Agriculture is a major economic sector in Pakistan – and according to some of those interviewed will increase in significance due to the decline in industries and manufacturing.

This chapter looks at the main discourse and policy objectives relating to agricultural innovation and food security and whether climate risk management has been addressed. It presents alternative discourses and evidence gap, and opportunities for climate resilience to be included.





Agriculture employs almost 44 per cent of the labour force and provides livelihoods to almost 68 per cent of the population, directly and indirectly. Export earnings of Pakistan are also heavily dependent on agricultural products. Agriculture also has a multiplier effect on national economy, poverty and income distribution. The new growth framework states that livestock and particularly dairy are potential high growth sectors.

However, Pakistan does not have a recent national agriculture policy. The sector is managed through economic instruments by subsidising key inputs and also fixing prices for produce. The Agriculture Commission Report of 1985 has been considered the best policy guideline for agriculture in Pakistan. The National Conservation Strategy of 1990 and the National Environmental Policy of 2005 have a section on sustainable agriculture. In the absence of any national agriculture policy we have to look into other national plans, strategies or other documents to understand planning and practice and get information and guidance about the agricultural sector. For the purpose of this policy discourse analysis, we consider documents such as Vision 2030, the Medium Term Development Framework (MTDF), the Framework of Economic Growth and the Climate Change Policy.

Government documents only address food security as determined by production and availability of a few commodities. The seriousness of the issue has never been properly reflected except in the formulation of the National Task Force on Food Security. However, little if any public policy work has as yet been done on the multiple dimensions of food security. The government has no national food security policy.

Alternative discourses are quite prevalent. SDPI has produced two reports during the last decade on the 'State of Food Insecurity in Pakistan' which are used as references for all policy debates.

## Main discourse and policy objectives

Vision 2030 addresses agriculture, livestock and fisheries and recognises some of the threats to the sector from environmental degradation and climate change. Vision 2030 asks for a competitive and sustainable agriculture sector and sets goals in terms of ensuring food security through sustainable agriculture, increased income and improved human health. Strategies to reach the agricultural developments set out in Vision 2030 include:

- Investment in research for new seed varieties, technologies, way of production, irrigation etc. to cope the challenge of climate change;

- Environment friendly technologies for agriculture;
- Reforms in agriculture marketing systems;
- Investment on biotechnology and move towards gene revolution;
- Efficient use of inputs e.g. water, etc.;
- Biological control of pests and disease to save the environment;
- Diversification of rural agriculture, opportunities for non-farming communities and introduction of concept of agriculture industry for improving the lives of rural people;
- Ensuring the availability of credit for agriculture.

The MTDF, following on from the Vision 2030, developed a road map for agricultural development in Pakistan. It recommended an increased allocation for agriculture from the annual budget. The government did increase allocation in 2005 but could not sustain this for a longer period.

The Framework for Economic Growth reviews the performance of the agricultural sector – identifying the large potential there is for productivity increases in the livestock and particularly the dairy sectors. It also flags the challenges of inefficient water use for irrigation and of natural resource degradation. Climate change is not mentioned as the challenge to the agricultural sector it clearly is. Pakistan lacks a clear, appropriate strategy for agricultural development and food security in the context of climate change.

Coastal areas have remained ignored for a longer period of time, especially regarding agriculture. However, fisheries got some attention from government due to the potential of export and high dependency of local livelihoods and food security. Policy work for fisheries started very late in Pakistan and most of the time the fisheries sector was included in the agriculture sector. However, with the increasing importance of the fisheries sector there arose a need for a national policy on fisheries and aquaculture.

The Poverty Reduction Strategy Paper 1 (PRSP-1) also asked for more investment in the fisheries sector to curb poverty and enhance food security in general and especially in coastal areas. PRSP-2 also emphasised development of the fisheries sector for ensuring food security in coastal areas. PRSP-1&2 recommended investing in coastal areas for the maintenance of food security and coastal ecosystems. PRSP-2 identified different programmes for fisheries in Pakistan.

In 2006, the government of Pakistan developed a National Policy for Fisheries and Aquaculture. The main goal of the policy was to ensure the development of fisheries and aquaculture for food security, economic growth, maintenance of environment and poverty alleviation. The specific goals of the policy are:

- Increase the contribution of the fisheries and aquaculture sectors to **national economic growth**
- Increase the contribution of the fisheries and aquaculture sectors to **poverty alleviation**
- Increase the contribution of the fisheries and aquaculture sectors to **food security**.

The government also tried to lay down a strategy to achieve the policy goal. Three fundamental elements of the strategy are;

- Sustainable development of inland and coastal aquaculture production
- Sustainable increase in inland and marine capture fisheries production
- Resolving post-harvest issues.

Sustainable development is taken to include the conservation of the environment and improving the living standards of people.

The Draft Climate Change Policy sets out policy measures for agriculture related to research, technology, management and risk management. These include:

- Agriculture: climate impacts assessments, new climate resilient crop varieties and livestock breeds, meteorological services for farmers, capacity development for researchers and for farmers;
- Technology: more efficient input use e.g. irrigation, mechanisation of farming practices, incentives for technology transfer and adoption, genetically modified crops and livestock;
- Management: climate change cells in the Ministry of Agriculture and the Pakistan Agricultural Research Centre, expansion of agricultural production to wastelands, rainwater harvesting, enabling environment for investments and insurance for farmers, livestock feed conservation, land-use planning and zoning;
- Risk management: early warning systems, improved extension services, climate resilient agriculture policy, diversification of crops and livestock, drought management as part of agricultural practice rather than disaster management.

## Programmes

The government initiated programmes following the framework set out in the MTDF and the guidelines provided by Vision 2030. These programmes emphasised increasing productivity, water use efficiency, cultivation in saline areas etc., but were not designed to take on board climate change effects. Although potentially there is a linkage to climate change, these programmes are for agricultural development and livelihood improvement irrespective of the climate context.

At the outcome level, these programmes address ensuring food security for an increasing population through increasing productivity by investing in research, technology and marketing infrastructure, both for inputs and outputs.

2010-2011 programmes with support from multilateral and bilateral agencies include:

- Grain Storage Project
- Chagai Water and Agriculture Development Programme
- Crop Maximisation Support Programme 6
- Rice processing
- Agriculture Research & Development
- Sustainable Livelihood in Barani Area
- Punjab Irrigated Agriculture Development
- Sindh on Farm Water Management Project.

2010-2011 projects supported by the government include those to construct dams and channels and resettle communities in Mirani, Sabakzai, Nari and Baluchistan by the Ministry of Water and Power. Also projects by the Ministry for Food and Agriculture including the National Integrated Pest Management Project, Rapid Conversion of Wild Olive into Oil Bearing Species, and the National Research and Development Project on Water Management of Spate Irrigation System in Rod-Kohi Areas.

## Main stakeholders

Under the administrative set-up of Pakistan, agriculture is the business of provinces but policy guidelines were provided by the federal government. However, after devolution, policy formulation has also been transferred to provinces, only a few functions have been left with the federal government. These federal functions for agriculture have been transferred to the Planning Commission of Pakistan. At the same time the Constitution Committee also proposed to establish a Division for Food Security at national level.

At present major stakeholders are:

- Planning Commission of Pakistan
- Pakistan Agriculture Research Council
- National Agriculture Research Council
- Food Security Division (expected to be established soon)
- Ministry of Commerce, for trade in agriculture
- Ministry of Industries for processing food
- Global Change Impact Studies Centre, for analysing impact of climate change
- Meteorological Department
- Provincial agriculture ministries
- Provincial planning departments
- Pakistan Maritime Security Agency
- Fisheries Development Board.

### How has climate risk management entered the agricultural innovation and food security discourse?

In the formal policy arena it is only in the Draft Climate Change policy where the need to address climate resilience in agriculture has been addressed as yet. Only once the policy is approved can it be implemented and that is some time off as yet.

The stakeholder interviews during the PDA revealed that research is generating evidence of projected impacts of climate change on agriculture and indeed on food security in Pakistan, but that this information is not influencing policy making.

Further work is necessary to understand how climate change is being addressed in the ways civil society and private enterprise are supporting and investing in agriculture.

### Alternative discourses and evidence gaps

The PDA did not reveal any alternative policy discourse around climate resilience and agriculture in Pakistan. However, given that the policy discourse rotates around the productivity effects of climate change on agriculture and says little about supporting farmer innovation and adaptation, nor the wider effects of climate change on food security, it is expected that alternative discourses, if absent, will emerge in the near future.

The evidence gaps related to agriculture, food security and climate change in Pakistan are manifold. However, most pragmatically as related to the direction of travel in this policy arena, there is the need to evidence the appropriateness and relevance of the existing discourse – largely represented by the Draft Climate Change Policy. From that perspective the evidence gaps include:

- Information that substantiates whether or not the measures in the Draft Climate Change Policy can achieve the desired policy outcomes;
- Evaluative assessments of the different ways of carrying out the measures listed in the Draft Climate Change Policy. This will include *ex-ante* evaluations of the distributive aspects of the costs and benefits to different stakeholder groups of the different measures and alternatives;
- Comparative information on alternative approaches to achieve the policy outcomes sought in the Draft Climate Change Policy.

Each of these gaps is substantial and it would require significant investments of resources to address them.

### Opportunities

- Gather evidence of how increased climatic variability and the increased frequency and severity of extreme weather events are affecting all aspects of food security, not just agricultural yields;
- Evaluate initiatives to mediate the effects of climate change on the food security of the climate vulnerable poor.

# Poverty reduction and social protection

Poverty in Pakistan has showed different trends under the different political regimes. Although the government claims that poverty has decreased, PDA stakeholder interviews revealed independent sources that poverty has increased in Pakistan.

This chapter looks at the forms of social protection that the government is providing to help poor people, and whether climate change resilience has been taken into account in government programmes and strategies, identifying potential opportunities and entry point for inclusion in policies.



In Pakistan, poverty analysts and policy implementers have always assessed poverty from an income perspective. Before 2004 few if any studies had looked at the relationship between the causes of poverty and changes in the environment. However, with the release of first Poverty Reduction Strategy Paper (PRSP-1) this changed. The PRSP paper chalked out a strategy to reduce poverty towards the attainment of the Millennium Development Goals (MDGs) including MDG-7, explicitly about the sustainability of the environment. From there onward debate and policy formulation started tackling the issues of poverty using environment as an important contributor. The 2005 MTDf followed the strategy laid down in PRSP-1. Environment and climate change were given due importance under the umbrella of MDG-7.

In 2009, PRSP-2 was formulated. The government gave priority to the environment and commissioned a study to look into more depth at the environment-poverty nexus. The study provided a comprehensive plan of how to measure aspects of this nexus and its impact on the national economy. PRSP-2 focused on the relations between environment and poverty, and treated environment as a cross-cutting theme.

### Main discourse and policy objectives

Both PRSP-1 & 2 emphasised the importance of agriculture, livestock and fisheries as prime sectors for poverty reduction in rural areas of Pakistan. The PRSPs proposed some projects to increase the productivity of agriculture, livestock and fisheries. However, the major focus was on how to capitalise the potential of these sectors for poverty reduction.

Pakistan has created a number of institutes and programmes to deliver social protection. Recently Pakistan has increased social protection funding substantially (from PKR 7 billion in 2002 to PKR 27 billion PKR in 2008). In 2007, the National Social Protection Strategy was developed to supplement other government initiatives. The strategy has five pillars for action:

- Income generation
- Nutrition support
- Human resource development
- Natural disaster management
- Enhanced role of NGOs and the private sector.

### Programmes

From 2008, the government stepped up income support social protection to people through cash transfers, e.g. the Benazir Income Support Programme, the Punjab Food Support Programme, the Aishana Housing Scheme.

Government interventions can be divided into two broad categories, direct and indirect interventions. Direct interventions include:

- Employment Old Age Benefit Institute (EOBI), Workers' Welfare Fund, Provincial Security benefits (employment guarantee based);
- Benazir Income Support Programme, Zakat, Bait-ul-Mal, Pakistan Poverty Alleviation fund (PPAF) (transfers), National Rural Support Programme;
- Micro financing and micro credit, Benazir Income Support Programme, Pakistan Poverty Alleviation Fund (PPAF), Khushal Pakistan Programme and Fund.

Indirect interventions include:

- Subsidy on food items through utility stores
- Minimum wage rate
- Life line tariff on electricity.

The private social protection system is also very strong, e.g. the Edhi Foundation, Akhuwat Trust, etc. Non-government organisations are also playing a prominent and important part.

In 2010-2011, China, Germany and the USA have provided support to flood rehabilitation, refugee support, and flood compensation projects. IDA grants were also accessed for post flood rehabilitation.

Relevant projects funded by the government include Environmental Rehabilitation and Poverty Reduction through Participatory Watershed Management in Tarbela Reservoir Catchments Area.

Under the Pakistan Sustainable Development Policy (PSDP) an allocation was made in 2005-2006 of PKR 25 billion and PKR 3 billion under the provincial PSDPs for various environmental projects covering environmental issues ranging from provision of clean drinking water to the fight against air and water pollution.

## Main stakeholders

Poverty reduction and social protection is a cross cutting theme and it should be part of all government institutions and departments. At present the major stakeholders are:

- Ministry of Finance, PRSP Secretariat
- Planning Commission of Pakistan
- Benizar Income Support Programme
- Ministry of Social Welfare and Population
- Ministry of Agriculture Food and Livestock
- Ministry of Women Welfare
- Ministry of Labour and Manpower
- Ministry of Local Government and Rural Development
- Ministry of Environment
- Ministry of Health
- Ministry of Education
- Pakistan Poverty Alleviation Fund
- Provincial line ministries and departments
- Non government Organisations
- UN agencies

However, major responsibilities lie with the PRSP Secretariat, the PPAF, the Ministry of Local Government and Rural Development and the Benazir Income Support Programme.

## How has climate risk management entered the poverty reduction and social protection discourse?

The Climate Change Task Force Report recommended starting programmes specifically for climate change vulnerable people.

The extent to which climate change resilience has been considered in social protection programmes is low. Key stakeholder interviews during the PDA showed that there is interest to explore how social protection has and can contribute to the climate resilience of the poorest. But as of yet this area has not been investigated.

## Alternative discourses and evidence gaps

The area of adaptive social protection is very new and no alternative discourses were identified through the PDA.

### Opportunities

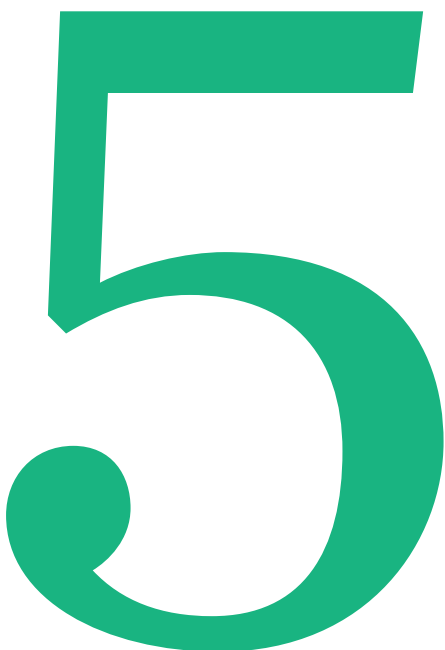
- Collate evidence on how the poorest (e.g. recipients of the Benazir Income Support Programme) have been affected by extreme weather events such as the 2010 and 2011 flooding. Assess to what extent access to social protection aided recovery and the protection of assets;
- Build adaptive social protection programmes based upon the evaluation of different strategies that focus on delivering both social protection to vulnerable individuals and households, and also building adaptive social infrastructure;
- Open up a dialogue between the main climate change policy stakeholders and those implementing the social protection programmes to explore how best to achieve synergies in policy objectives.



# Ecosystem and natural resource management

Pakistan is blessed with an abundance of natural resources – forests, deserts, plains, rivers, mountains, sea, etc. This diversity in geography gives Pakistan a unique landscape for growth and development and the opportunities rendered by these natural resources could be used to alleviate poverty. However, the ecosystem and natural resources have not had proper attention from governments.

This chapter looks at the findings from policy discourses on ecosystems and natural resources and whether the impacts of climate change have been considered. It discusses the emerging green economy discourse, as well as ways to align disaster risk reduction and management with climate change adaptation, presenting opportunities to include climate resilience in this sector.



Pakistan is losing its natural resources at an alarming speed. Deforestation is one of the major issues. According to the National Forest and Range Resources Assessment Study (NFRRAS) conducted by the Pakistan Forest Institute in 2004, Pakistan is losing forest at the rate of 27,000 ha per year.

Policy debates on natural resources started in 1992 with the formulation of the Forestry Sector Master Plan (FSMP) and the National Conservation Strategy (NCS). These two documents were the first to explicitly discuss the management of natural resources for sustainable development in Pakistan. However, after approving the FSMP and NCS, Pakistan took a very long time to formulate the first environment and forest policies.

Pakistan has developed policy frameworks on environment and sustainable development issues, with the financial and technical assistance of the relevant UN agencies, such as Vision 2025 for Forest Biodiversity Conservation, the National Forest Policy (draft), National Wetlands Policy, National Strategy for Sustainable Development (not yet approved), Energy Conservation Act, National Sanitation Policy, and policies and strategies prepared as part of implementation of the multilateral environmental agreements (MEAs).<sup>5</sup>

Pakistan developed a National Conservation Strategy (NCS) in 1991. This was implemented through a National Environmental Action Programme (NEAP) with national finance and assistance from multilateral agencies, including the World Bank, the Asian Development Bank and the UNDP. In 2008, Pakistan signed an agreement for cooperation in environment under the 'UN Delivering As One Initiative'. This led to the formulation of the National Environment Policy. The next phase of the programme was launched in 2012.

Developments at the policy and institutional levels have not achieved improvements in the state of the Pakistan environment. The recent Stocktaking Report for the Rio+20 meeting concludes that there is '... unabated and in some cases rapid deterioration. Water, air, and soil pollution have not been curbed, and progress in reversing the depletion of forests, lakes, and mangroves is unsatisfactory.'<sup>6</sup> On the other hand, Pakistan's vulnerability to the negative effects of climate change has become a major concern.<sup>17</sup>

## Main discourse and policy objectives

The Forest Policy was first formulated in 2001. The policy guidelines gave a set of recommendations for better management of natural resources. The goal of the policy was the 'sustainable management of natural resources' in Pakistan. The Forest Policy has the following important elements:

- Reducing socio-economic impacts on forests and biodiversity.
- Supporting local government in sustainable management of renewable natural resources
- Developing appropriate policies for management of fragile ecosystems e.g. mountains, deserts etc.
- Preservation of unique forest
- Management of rangeland ecosystems.

The Second National Forest Policy is under preparation. A draft has been submitted for approval by the government.

In 2005, the first Environment Policy was formulated. It recommended the following steps:

- Ensure management of natural resources
- Enforce national biosafety laws and guidelines
- Establish National Institute of Biodiversity and Ecosystem Sciences
- Develop and implement national wetland policy
- Integrated plan for coastal management
- Create protected areas for forest, mountains and marine ecosystems
- Revise and implement the Biodiversity Action Plan
- Encourage environment friendly agriculture practices
- Introduce and encourage biological control of pest management
- Develop programmes for control of desertification of productive land and in desert areas of Pakistan
- Encourage sustainable fishing
- Involve local communities in sustainable management of natural resources.

<sup>5</sup> UNDESA, 2011.

<sup>6</sup> World Bank calculated costs to the national economy estimated at PKR 365 billion annually – cited in Stocking Report (UNDESA 2011).

<sup>7</sup> *Ibid*

The government has also developed a Draft National Policy on Rangeland Management. The goal and objectives are listed below.

#### Goal:

To rehabilitate the degraded rangelands and pastures close to their potential for increased productivity, enhance their environmental and regulatory functions and services, increase and conserve rangeland biodiversity besides mitigating the negative impacts of global climate change through collaborative and holistic rangeland resources to contribute to the livelihood improvement of the rangelands dependent communities, as well as to the national economy.

#### Objectives:

- Increase services and functions of rangeland areas for communities and country
- Rangeland business will be promoted to increase income of people and alleviate poverty
- Efforts would be made to conserve the biodiversity of rangeland areas
- There would be strategy for mitigating impacts of climate change
- Sustainable management of rangeland
- Ecotourism would be promoted in tourism specific rangelands

The Report and the most recent MTRF also suggested the same guidelines for the sustainable management of ecosystems and natural resources. The PRSPs mentioned ecosystem and natural resources but not in any detail. The main policy documents on environment, forest and rangeland did not look into the impacts of climate change on ecosystem and natural resources.

The environment, forest and rangelands policies have not been followed up with substantive implementation. Only a few short-term projects have been implemented that have poor records on outcomes and impact.

## Programmes

Current relevant projects and other initiatives include:

- The Coastal Areas/Dryland Biodiversity and Survey Management (cost: PKR 40m)
- The Multisectoral Mega Project for Conservation of Juniper Forests (cost: PKR 493m)
- Programme for Mountain Areas Conservation, NAs, Chitral, AJK (cost: PKR 496m)

In addition, the government has invested in forestry projects for carbon sequestration, environmental rehabilitation and (re)afforestation.

## Main stakeholders

The main stakeholders of ecosystem and natural resource management are:

- The Environment Division of the Planning Commission
- Forest Department
- Wildlife Department
- Ministry of Local Governments and Rural Development
- Ministry of Petroleum and Natural Resource Management
- Rangeland Management Department
- Ministry of Agriculture, Food and Livestock
- Ministry of Water and Power
- Relevant provincial ministries and departments
- Non-government organisations, e.g. IUCN, WWF, SDPI, etc.
- UN agencies, e.g. the United Nations Environment Programme (UNEP).

## How has climate risk management entered the ecosystems and natural resource management discourse?

This process has begun and attention has been drawn to this area by Pakistan's involvement in the UNFCCC negotiations and more recently through preparation for the United Nations Conference on Sustainable Development (UNCSD) Rio+20 meeting. The discourse can be characterised as 'impacts driven' whereby the main component of the discourse is the need to assess (largely through modelling) and then address the ways climate change will affect ecosystems and natural resources – particularly water resources. This 'impacts driven' discourse is amenable to moving towards the dominant economic growth discourse and in doing so is adopting parts of the global green economy discourse (see for example the conclusions of the Rio +20 Stocktaking report) whereby climate change effects are addressed through climate proofing economic sectors and the resources they depend upon and providing a policy and regulatory framework for low emissions innovation and green growth.

However, the wider development policy arena is proving difficult to convince of the relative importance of ecosystems and natural resources management for growth and in particular the need to address climate change. The decisions on institutional arrangements for climate change must await the outcome and implications of the devolution of ministries due to the 18th Amendment. This has led to the Draft Climate Change Policy not being approved and delays in the preparation of the actions plans for adaptation and mitigation.

## Alternative discourses and evidence gaps

The green economy discourse is emerging and consequently poorly defined as yet. It is difficult therefore to identify an alternative discourse. The alternatives from the civil society groups put greater emphasis on vulnerability of ecosystems and people by protecting the assets of the climate vulnerable poor and upon more effective ways to align disaster risk reduction and management with climate change adaptation. This discourse is also emerging and yet to be consolidated.

### Opportunities

- Assess the effectiveness of ecosystems and natural resources management interventions in terms of their contribution to the climate resilience of the poor;
- Collate the knowledge and evidence on the environmental change and poverty nexus to develop priority areas for policy development.

# Conclusions

This concluding section outlines some key opportunities and entry points that the Pakistan PDA has identified towards climate resilient development. It focuses on the three sectors explored throughout this report: climate risk management; agricultural innovation and food security; and poverty reduction and social protection.



Alternative discourses on achieving climate resilience are gaining strength but their spectrum is very limited so far. Only a few international and national NGOs are taking up the issue of climate change and trying to lobby with government. Grassroots level awareness and discourse is missing due in part to a lack of effort by government and NGOs.

This PDA has clearly identified a number of gaps which can be converted into opportunities. The New Framework for Growth is an example. There is a lot of debate about the sustainability of growth. However, environment and climate change are only now being factored in. Sustainable growth in Pakistan is usually defined as maintaining growth for the longer period, and not through the lens of environment and climate change. Climate change risks are now being discussed at a national level. This is an entry point where efforts to bring environment and climate change into the main policy discourse can be strengthened by non-state actors.

The MTDF tried to give a direction on sustainable development in Pakistan. However, few of the promises in MTDF were delivered. Exceptions include interventions in agriculture (crop maximisation, white revolution, etc.), increased social protection measures and some support to fisheries. The main gap in the official policy discourse is an adequate workplan with time and budgetary allocations.

There is not only the opportunity, but as regards the developmental outcomes of climate change investments, the need to evaluate the contribution of climate resilience interventions in terms of their contributions to inclusive economic growth. The reciprocal is also true. There is the opportunity/need to assess economic growth oriented interventions for their contributions to the climate resilience of the poor and the ecosystems these people depend upon.

In terms of the policy arenas explored during the PDA, the thematic opportunities identified for building climate resilience into current policies and programmes.

Climate risk management:

- Testing the implementation at scale of climate-smart disaster risk reduction;

Agricultural innovation and food security:

- Gather evidence of how increased climatic variability and the increased frequency and severity of extreme weather events are affecting all aspects of food security, not just agricultural yields;
- Evaluate initiatives to mediate the effects of climate change on the food security of the climate vulnerable poor.

Poverty reduction and social protection:

- Collate evidence on how the poorest (e.g. recipients of the Benazir Income Support Programme) have been affected by extreme weather events such as the 2010 and 2011 flooding. Assess to what extent access to social protection aided recovery and the protection of assets;
- Build adaptive social protection programmes based upon the evaluation of different strategies that focus on delivering both social protection to vulnerable individuals and households, and also building adaptive social infrastructure;
- Open up a dialogue between the main climate change policy stakeholders and those implementing the social protection programmes to explore how best to achieve synergies in policy objectives.

Ecosystems and natural resource management:

- Assess the effectiveness of ecosystems and natural resources management interventions in terms of their contribution to the climate resilience of the poor;
- Collate the knowledge and evidence on the environmental change and poverty nexus to develop priority areas for policy development.



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# Annexes

Annex 1. Key stakeholders interviewed.

NAME	DESIGNATION & INSTITUTION
Mr Javed Ali Khan	Director General, Environment, Planning Commission, Government of Pakistan
Mr Irfan Tariq	Director, Environment (Planning), Planning Commission, Government of Pakistan
Ms Shahida Jamil	Director (Planning), Pakistan Agriculture Research Council (PARC)
Dr Shahid Ahmad	Member in charge, NR Division, Pakistan Agriculture Research Council (PARC)
Dr Bashir Ahmad	Director (Water), NR Division, Pakistan Agriculture Research Council (PARC)
Dr Qamar Uz Zaman Ch.	Advisor, Met & Climate Affairs, Government of Pakistan.
Mr Mehmood Akhtar Cheema	Regional Programme Manager, IUCN, Islamabad Programme Office
Mr Ahmad Saeed	Project Manager, National Impact Assessment Programme, IUCN, Islamabad Programme Office
Dr Rehana Siddiqui	Director, Centre for Environmental Economics and Climate Change, Pakistan Institute of Development Economics (PIDE)
Dr Rashid Amjad	Vice Chancellor, Pakistan Institute of Development Economics (PIDE)
Dr Ishfaq Ahmad	Senior Advisor Climate Change & Development, Planning Commission, Government of Pakistan
Dr Raja Aurangzeb Khan	Chief Environment, Planning Commission, Government of Pakistan
Mr Ahmed Kamal	Member (Planning), Prime Minister's Secretariat, National Disaster Management Authority (NDMA)
Mr Ahsan Ali Mangi	DG Operations, Benazir Income Support Programme (BISP)
Mr Amir Mohyuddin	Director Admin/HR, Benazir Income Support Programme (BISP)
Mr Gul Najam Jamy	Project Manager, Social Safety Net Technical Assistance Project, Benazir Income Support Programme (BISP)
Dr Arshad M. Khan	Executive Director, Global Change Impact Study Centre (GCISC)

## List of abbreviations

AEDB	Alternative Energy Development Board	NDMA	National Disaster Management Authority
BISP	Benazir Income Support Programme	NDMRF	National Disaster Risk Management Framework
CDM	Clean Development Mechanism	NEAP	National Environmental Action Programme
COP	Conference of the Parties	NEEDS	National Economic and Environment Development Study
DDR	Disaster Risk Reduction	NEPA	National Environmental Protection Agency
DRM	Disaster Risk Management	NFRRAS	National Forest and Range Resources Assessment Study
EOBI	Employment Old Age Benefit	NGO	Non-government Organisation
FSMP	Forestry Sector Master Plan	PAEC	Pakistan Atomic Energy Commission
GCISC	Global Change Impact Studies Centre	PARC	Pakistan Agricultural Research Council
GHG	Greenhouse gas	PC-TCC	Planning Commission Task Force on Climate Change
GO	Government Organisation	PDA	Policy Discourse Analysis
HDIP	Hydrocarbon Development Institute of Pakistan	PEPA	Pakistan Environmental Protection Act
IDA	International Development Association	PFI	Pakistan Forest Institute
IIED	International Institute for Environment and Development	PIDE	Pakistan Institute of Development Economics
IMF	International Monetary Fund	PKR	Pakistan Rupee
ISET-Pakistan	Institute for Social and Environmental Transition in Pakistan	PMCCC	Prime Minister's Committee on Climate Change
IUCN	International Union for Conservation of Nature	PPAF	Pakistan Poverty Alleviation Fund
MDG	Millennium Development Goal	PRSP	Poverty Reduction Strategy Paper
MEA	Multilateral Environmental Agreement	PSDP	Pakistan Sustainable Development Policy
MinFA	Ministry of Food and Agriculture	SDPI	Sustainable Development Policy Institute
MinLDD	Ministry of Livestock and Dairy Development	SLM	Sustainable Land Management
MoE	Ministry of Environment	SUPARCO	Space and Upper Atmosphere Research Commission
MoFAFF	Ministry of Foreign Affairs	TAP	Technical Advisory Panel
MoH	Ministry of Health	TFCC	Task Force on Climate Change
MoInd&P	Ministry of Industries and Production	UNDP	United Nations Development Programme
MOP	Meeting of the Parties	UNEP	United Nations Environment Programme
MoST	Ministry of Science and Technology	UNFCCC	United Nations Framework Convention on Climate Change
MoW&P	Ministry of Water and Power	UNSCD	United Nations Conference on Sustainable Development
MTDF	Medium Term Development Framework	WAPDA	Water & Power Development Authority
NARC	National Agricultural Research Centre	WWF	World Wildlife Fund
NCCP	National Climate Change Policy		
NCCPA	National Climate Change Plan of Action		
NCS	National Conservation Strategy		

Policy Discourse Analyses (PDAs) draw on existing evidence and engage key stakeholders in a dialogue to review different policy arenas. IIED is undertaking case studies of countries participating in the PDAs and this report focuses on Pakistan, where a PDA was carried out to assess the extent to which climate resilience is factored into current policies and programmes. The report reviews recent developments in key policy areas relating to climate resilience, as well as the main discourses, policy objectives and stakeholders in key thematic areas to establish how climate risk management is being addressed. The report also identifies alternative discourses and evidence gaps to present opportunities and entry points for climate resilient development.

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