

Political and Institutional Analysis of Sind



Author

Meher Marker Noshirwani

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606-607, Fortune Centre, Block 6, P.E.C.H.S., Shahrah-e-Faisal, Karachi

Tel: 021-34544791-2, Fax: 021-34544790, www.wwfpak.org/ccap

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List of Acronyms

1	ACS	Additional Chief Secretary
2	ADB	Asian Development Bank
3	ADP	Annual Development Plan
5	CBD	Bio diversity Commission
6	CDM	Clean Development Mechanism
7	CITES	Convention on International Trade in Endangered Species
8	COP	Conference of The Parties
9	CNG	Compressed Natural Gas
10	CP	Cartagena Protocol
11	CSO	Civil Society Organization
12	CSR	Corporate Social Responsibility
13	DDWP	Department for Development Working Party
14	DFID	Department for International Development
15	DMA	Disaster Management Authority
16	DRM	Disaster Risk Management
17	DRR	Disaster Risk reduction
18	EC	European Commission
19	ECNEC	Executive Committee of the National Economic Council
20	EIA	Environmental Impact Assessment
21	EPA	Environmental Protection Agency
22	FAO	Food and Agriculture Organization
23	GDP	Gross Domestic Product
24	GST	Goods and Services Tax
25	GM	Genetically Modified
26	HEC	Higher Education Commission of Pakistan
27	INGO	International Non-Governmental Organization
28	IRSA	Indus River System Authority
29	IUCN	International Union for Conservation of Nature
30	KPK	Khyber Pakhtunkhwa
31	LDC	Least Developed Countries
32	LEAD	Leadership for Environment and Development
33	LNG	Liquid Natural Gas
34	MEA	Multilateral Environmental Agreement
35	MFF	Mangroves
36	MTD	Mid- term debt
37	NCS	National Conservation Strategy
38	NDMA	National Disaster Management Authority
39	NEEDS	National Economic and Environmental Development Study
40	NEPA	National Environmental Protection Agency
41	NEQs	National Environmental Quality Standards
42	NFC	National Finance commission Award
43	NGO	Non-governmental Organization
44	NOC	Non- Objection Certificate
45	NSDS	National Sustainable Development Strategy
46	PC-1	Planning Commission form 1
47	PDMA	Provincial Disaster Management Authority

48	P&D	Planning and Development Department
49	PDWP	Provincial Development Working Party
50	PEPA	Pakistan Environmental Protection Act
51	PIDE	Pakistan Institute of Development Economics
52	PSDP	Public Sector Development Plan
53	RCC	Reinforced Concrete
54	SDPI	Sustainable Development Policy Institute
55	SUPARCO	Pakistan Space and Upper Atmosphere Research Commission
56	UNCCD	United Nations Convention to Combat Desertification
57	UNEP	United nations Environment Programme
58	UNFCCC	United Nations Framework Convention on Climate Change
59	UNESCO	United Nations Educational, Scientific and Cultural Organization
60	WAPDA	Water and power Development authority

Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan Climate Change Adaption Project

Political and Institutional Analysis in Sindh

BACKGROUND

The World Wide Fund for Nature – Pakistan (WWF – Pakistan) has initialed a five year project entitled ‘Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan,’ in partnership with Leadership for Environment and Development (LEAD) - Pakistan and WWF – UK. The EC funding for this project falls under the Thematic Programme for Environment and Sustainable Management of Natural Resources (ENRTP).

The project has been designed to help Pakistan meet its commitments under the United Nations Framework Convention on Climate Change (UNFCCC), and contribute to the EC’s Climate Change Alliance. It will support Pakistan in integrating climate resilience into local development plans. Initiatives under this project include: vulnerability assessments; formulating local adaptation plans and integrating adaptation into sectoral policies and plans; developing community-based pilot adaptation strategies to safeguard threatened coastal communities, and fostering regional knowledge exchanges on best practices for adaptation in trans-boundary deltas. An integral part of this project is a holistic delta-wide vulnerability assessment, which is made up of 6 individual studies. These would inform government plans and policy for mainstreaming climate change adaptation. The CCAP project intends to reduce the risks faced by vulnerable communities in coastal areas of Pakistan through the implementation of a variety of actions. These include intervention related to adaptation and building capability among vulnerable coastal communities; in addition to promoting integrated water resources management, and river basin management. The project also focuses on supporting governance mechanisms to become more responsive and robust when addressing climate variability and change related impacts. ¹

¹ Project Overview: Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan 06 June 2011 WWF.

Context: Climate Change and Policy

“Climate change affects the people who live in threatened areas on the coasts, due to frequent and intensive monsoon’s there are many problems because of Pakistan’s strategic location. From the Arabian Sea to the Himalayas, and we have 1000 km of coast, with a glacial mass in the north known as the 3rd Pole of the World and the water tower of Asian countries, all this lies in our geographic region.” (Respondent from Ministry of Climate Change)

The impact of Climate Change to Pakistan’s environment has been identified as changing weather patterns with increasing intensity and frequency of unpredictable monsoon rains causing intense floods and droughts, receding glaciers in the Hindu Kush-Karakoram-Himalayan (HKH) region due to global warming, greater siltation of dams, and increasing temperatures and longer cold periods which will affect agriculture production. In addition, deforestation, and soil erosion in the north, and sea intrusion in the Indus delta will threaten the mangroves and the breeding grounds for prawn and shrimp, destroy coastal agriculture, and the expected sea level rise will have a severe affect on the livelihoods of those living along the coast.² Compounded to this is political and economic instability, an energy crisis, rising inflation, population pressure, food and water scarcity, and a low level of preparedness for natural disasters, which will increase the effects of climate change each year.

Pakistan is a country now ranked 16th, up from 29th by Maplecroft’s (2010) Vulnerability Index. This ranking, along with three consecutive years of flood related devastation in Sindh (2009, 2010, 2011), changes in monsoon patterns, and the lack of coastal resilience to cyclones (Phet 2011, Yemyin 2007) and storm surges, provides evidence of Pakistan’s increasing vulnerability to climate change.³ Thus, as a country vulnerable to the adverse impacts of climate change, Pakistan cannot afford to ignore the threat of climate change which is still not reflected in the overall policy planning process.⁴

However, the report of the Planning Commission’s Task Force on climate change in 2010, the National Climate Change Policy document commissioned by the Ministry of Environment in April 2011 the establishment of the Climate Change Ministry and subsequent Climate Change Policy, indicate important measurers which have been taken to mainstream climate change in the policy planning process. At the national level legislation such as the Pakistan Environmental Protection Act (PEPA) enacted in 1997, provided the legal basis for the Pakistan Environmental Protection Council, the strengthening of the Federal Ministry of Environment, and the National Environmental Protection Agency (NEPA) at the Federal level. It also provided for the establishment and strengthening of Ministries of Environment, Sustainable Development Boards, environmental laboratories and environmental tribunals at the Provincial levels. Policy documents such as the National Environment Policy (2005), National Forest Policy (Draft), National Energy Conservation Policy (2006), and Policy for Development of Renewable Energy for Power Generation (2006) are among the instruments to guide environmental issues.

International Commitments

² National Climate Change Policy Draft, Government of Pakistan, Ministry of Environment 2011

³ ‘Vulnerability Assessments for Climate Change in the Coastal Areas of Pakistan’
Authors: Zaheer, Khadija and Alesworth-Siddique, Naomi November 2011

⁴ Institutional Arrangements for Climate Change in Pakistan Project Report Series # 19
July 2011 Project Leader: Shakeel Ahmad RamayLead Author: Farrukh Iqbal Khan
Assistant: Sadia Munawar

At the international level Pakistan has signed and ratified various environmental agreements (MEAs) including the UNFCCC, the Bio Diversity Commission (CBD) and the Bio safety Protocol (CP), the Desertification Convention (UNCCD), the Chemicals and Hazardous Waste Conventions, and the Convention related to Endangered Species (CITES).

And as part of its commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, Pakistan has supported a number of climate change studies such as the UNEP country study on Adaptation, and the first National Communications study on Climate Change. And yet, despite these initiatives the policy makers have not recognized the enormous challenges related to climate change particularly in the different sectors. This is apparent in the absence of a focus on climate change in Vision 2030 and the Medium Term Development Framework (2005-2010).⁵

The National Sustainable Development Strategy (NSDS) 2012

According to the National Sustainable Development Strategy (NSDS) environmental degradation cost Pakistan six percent of GDP per annum. The NSDS recognizes climate change as a major environmental challenge which “*directly and very strongly impinges upon future planning for sustainable development in Pakistan.*”⁶ It recognizes the threat climate change poses to water, food and energy security. It mentions the coastal and marine environment, agriculture and livestock, forests, and biodiversity as sectors which will be affected, and emphasizes the socio- economic costs of climate change to progress made on poverty alleviation, and social development. The NSDS makes the linkages between social, economic and environmental dimensions for sustainable development, and acknowledges the lack of implementation of policies as the main impediment to progress.

Taking a historical perspective from the National Conservation Strategy 1992, to the current Climate Change policy, the NSDS addresses the challenge of policy integration as “*Pakistan would have been better placed if it had promoted policy integration in such a way that social, economic and environmental dimensions of development would have worked in tandem with each other.*” Thus there is a “*need to amend these policies of capital driven growth and to focus on policies that give due cognizance to ‘capitals’ that sustain the human well being including natural, human, and socio-cultural capital.*” It also proposes a “*people centered approach, with increased participatory planning and management through involvement of stakeholders.*”⁷

With specific reference to Climate Change the NSDS, states that “*Pakistan’s contribution to global green house gasses emission is negligible, on a per capita basis it ranks 135th in the world*”, and the Strategy provides steps to prepare for climate change and its uncertainties. These are identified as, implementation of the Climate Change Policy, mainstreaming of climate change in plans and policies, equal emphasis on mitigation and adaptation, to recognize social justice implications of climate change for the poor and vulnerable groups, strengthen inter-ministerial decision making and coordination mechanisms on climate change, and undertake strategic adaptation responses at policy, management and operational, and community led adaptation, for action at national, provincial, and community level. It also suggests, minimizing the risks from floods, and droughts, using research to assist the plans and efforts, and promote

⁵ ibid

⁶ The News International- Future Climate Impacts to Cost Pakistan Aoun Sahi 22 June 2012

⁷ National Sustainable Development Strategy (NSDS) Forward, and Executive Summary.

capacity building of government at provincial and national level. In the international arena it suggests controlling Pakistan's own GHG emissions.⁸

The 18th Constitutional Amendment

In April 2010 the 18th Constitutional Amendment was passed which devolved a number of responsibilities to the provinces. The Federal government retained a few powers such as reporting on international commitments and a number of subjects were devolved to the provinces. The process is still unfolding itself and the success of the devolution process will only be seen when the results are achieved in terms of a change in the lives of those at the local level, through improved policy-making and implementation at the provincial level. This is an enormous challenge for the provincial government, as provincial autonomy has suddenly increased, and the institutional infrastructure and mechanisms are not in place to deal with the large workload⁹. Thus, the gaps and challenges at the provincial level still have to be addressed to ensure a continuation of plans and projects, and to maintain a momentum towards climate change resilience.

Coastal Areas of Sindh

The coastal areas of Sindh are vulnerable and exposed to cyclones and tsunamis and thus the coastal inhabitants would be the first to be effected in the event of a natural disaster. Low adaptability to climate change, unplanned development and the increase in population has put immense pressure on the coast which has created conditions for natural hazards and risks. The mangrove eco-system is the most reliable natural shield for coastal villages against cyclones, high tides, and possible tsunami's. However local communities have little understanding of the nexus of the mangrove eco system with disaster risk reduction. In addition, due to the shortage of fresh water flows from the River Indus, industrial pollution, and the fact that the wood is widely used in factories as fuel for burners the mangroves eco system is being rapidly degraded thus exposing coastal villages to grave risks of coastal disasters, with very little time to respond. Hence, at the District level it is essential for those who are directly affected by climate change to be involved in the policy making process.

Study Context

It is within this scenario that the study a Political and Institutional Analysis in Sindh is being conducted, which will focus on; policy instruments and mechanisms, policy making, planning and implementing organizations, within the context of mainstreaming climate change. The objective of the study is to provide a guideline for mainstreaming climate change adaptation in a post-18th Amendment scenario at the national/provincial and district level, based on interviews

⁸ Ibid. NSDS Executive Summary pg 11.

⁹ Zahid Hamid Advocate, Supreme Court of Pakistan and Member, National Assembly of Pakistan, Constitution and Environment Law: Recent Developments South Asia Conference on Environmental Justice Bhurban: 24-25 March, 2012

conducted with key informants related to environment and climate change in the Federal Ministry of Climate Change, the Provincial Government of Sindh, civil society, academic research institutions, donors, and INGO's. The research was conducted at the time when the Climate Change Policy draft had been approved by Cabinet, but its notification had not been issued.

INTRODUCTION

In Pakistan social development policies are invariably formulated by decision makers such as government officials, the bureaucracy, political leaders, and recently the judiciary, who shape the policies of the country. In this scenario social development priorities are not determined by the people most affected by policy but by powerful individuals who may or may not reflect the needs of the public. Hence, the gap between policy and vulnerable communities is widening, and as a result socio-economic disparities continue to prevail. In the context of Climate Change communication in the form of dialogue, debate or discussions is essential to inform the policy making process, and is extremely important at all levels and among stakeholders to increase the understanding of climate change, and the implications of policy on the lives of the people it seeks to improve. Climate change is a relatively recent concept, and the perspective of the marginalized, and the "voices of the vulnerable communities" must be an integral part of the climate change policy formulation process, and the adaptation process itself. Unless the local communities are included in decision making the "ownership" of a policy and its implementation will not succeed. Issues of governance reflect the inclusion or exclusion of the people. If those who implement policy, and are affected by it are excluded from the process, a policy will be limited in its effect. Therefore, participatory mechanisms and consultative processes, and strategies which could provide opportunities to increase and strengthen communication between stakeholders are necessary for effective implementation of the climate change policy. So, civil society, community based organizations, representatives of grass root movements, elected representatives at the district level, and particularly women should be allowed to actively participate in various consultative forums. Often these "participatory" processes take place in cities or locations which local communities cannot attend. This leaves out realistic views of the people who are important stakeholders in the policy making process, since they are the ones who experience the impact of climate change. This exclusion leads to ineffective implementation and women, and vulnerable communities remain outside the policy making process.

Thus this qualitative research study presents the opinions and views of key informants in relation to climate change, and their experiences of the policy making process. It is based on 21 interviews conducted with respondents from a cross section of groups within government at the Ministry of Climate Change, in the Provincial government of Sindh, civil society, academic institutions, donors, and international INGO's.

Section 1: focuses on **Policy making, planning and implementing organizations**, and discusses the policy making process in generic terms and tries to understand how development policies are formulated from the perspective of the respondents interviewed, based on their opinion, knowledge, awareness and experience. It looks at policy making, in particular the Climate Change policy, the role of key institutions in decision making, resource allocations, coordination and implementation, the role of gender, the impact of the 18 Amendment, challenges of implementation, and issues around mainstreaming climate change.

Section 2: looks at **Policy instruments and mechanisms** in terms of which policy documents are used to guide the discussions on climate change, a historical perspective on how environment became a part of the national focus, whether climate change is a priority, linkages between climate change and development policies, a focus on the coastal areas of Sindh in terms of development policies, successful examples to assist in mainstreaming climate change, and possible areas of intervention.

Section 3: focuses on the issue of **mainstreaming of climate adaptation into policy making and planning** and the causes of climate change, adjustments at local level in response to climate change, government focus on adaptation, plans at Union Council level, mechanisms for implementation, and feedback processes.

Sections 4: provides some **suggestions, and follow up actions** based on the views of the key informants.

METHODOLOGY

This qualitative research study was conducted through a series of 20 interviews and 1 Focus Group Discussion. The interviews were of key informants from a cross section of groups, to capture their perspective in relation to climate change, and their experiences of the policy making process, from individuals within government at the Ministry of Climate Change, in the Provincial government of Sindh, civil society, academic institutions, donors, and international INGO's. The questionnaire was designed based on secondary data of WWF's project; Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan, and related documents on Climate Change. The questions were developed as a guideline for the discussion around the issues related to the objective of the study. The objective of the study was to provide a guideline for mainstreaming climate change adaptation in a post-18th Amendment scenario at the national/provincial and district level. (List of Respondents in Annex)

SECTION 1: POLICY MAKING, PLANNING AND IMPLEMENTING ORGANIZATIONS

This section focuses on the policy making process in generic terms and tries to understand how development policies are formulated from the perspective of the respondents interviewed, based on their opinion, knowledge, awareness and experience. It looks at policy making, in particular the Climate Change policy, the role of key institutions in decision making, resource allocations, coordination and implementation, the role of gender, the impact of the 18 Amendment, challenges of implementation, and issues around mainstreaming climate change. The respondents were a cross section of individuals within government at Federal level, in the Provincial government of Sindh, civil society, academic institutions, donors, and international NGO's.

1.0 How are national policy and plans made? (Five Year Plans/ PRSP's/ National Budgets) Please specify sequence, necessary sanctions, and sanctioning bodies.

The question how are national policies and plans made, was asked to understand how respondents perceived the policy making process, what they knew about the process, and to determine the different perspectives which exist on this complicated issue. According to some

respondents of the **Provincial government** national policies and plans are made by the Federal Ministry which has a consultative process either in Islamabad or at the provincial headquarters which exists to gauge the opinion and perceptions of the provinces when they frame national policies, and this is a good interactive process. But when workshops or other interactive sessions are held, then the representation is usually from the Deputy Director level, and senior people at the level of the Secretary or the Minister, and those close to the decision making process do not participate. Therefore, the feedback from the provinces is taken from mid level officials and not decision makers, so senior government representatives should attend policy making sessions. Policies are also developed at the Provincial level which is identified according to the needs of the provinces, who prepare proposals which are submitted to federal government and the Planning Department. These are forwarded to the Economic Affairs Division, and then to Parliament where decisions are made. The parliament gives direction through the Planning Division to the provinces where the policy is implemented.

Projects are implemented by the departments and Planning and Development is the custodian of development. The monitoring of policy its evaluation, the concerns, and conflicts, is the responsibility of the Additional Chief Secretary who is the Chairman of the Provincial Development Working Party (PDWP) and has the authority to approve financial resources. The projects are then executed through NOC's and the Planning and Development supervises the monitoring, and evaluation process. Recently at provincial level a new cell has been formed called the Third Party Cell, which is a mechanism to see if the projects are implemented according to the object and scope of activities.

A few respondents had a different perspective and said that there is no coherent policy and strategy with a common goal at provincial level. In their opinion CSO's and international organizations should assist the government and there is no time to waste. It was also said that in the Provincial government there is very little in terms of formal policy making. The Annual Development Plans are a collection of schemes, of bricks and mortar. *"In government they just move files at every stage, there are only a handful of officers who bother to do something, no thinking takes place, no discussions, files are just moved on from one person to the next, with brief comments and nothing substantial on them"*.

From a **civil society** perspective, most government plans and policies rarely consult the grassroots the people are never taken into account or included in the decision making process. An example by one respondent was the rise in sea level, where scientists says sea level rise is not significant, but the people say the sea level rise is happening because they live on the coast. *"The policy maker and scientist are not on the ground, policy is conceived and then Action Plans are made, but the people are not consulted."* Certain organizations such as IUCN are replanting mangroves, and there has been a drop in fish catch, and so suggestions are being made to the local community to address these issues, but where is the team to implement the suggestions. *"You can go to RIO + 20 but you have not considered the end users in the plans."* Other respondents shared the same opinion and said that if we were to look at the history of the development sector, the main reason policies have failed is because we focused on the policy makers and not the end users. If you are preparing a strategy you have to contact the policy maker, bureaucracy, scientist and the community, nothing will be successful without the involvement of the community. When we talk about policy why has there been no practice, because people are reluctant to implement policy because they do not own the policy, there is no sense of ownership among the people. Policy making at the national or provincial level is not a participatory process, and stakeholders are not consulted.

An activist from the fishing community said the development of the Fisheries Policy was not a participatory process, so when policies are not participatory they are never implemented. *“Policies stay on the files and are not made into action”*. The Pakistan Fisher Folk Forum wanted a sustainable fisheries policy, and rejected the National Fisheries Policy and made an alternate draft policy and submitted it to government. And according to the Chairperson, *“they only took 1 or 2 lines from our draft.”* The ground realities are that the people’s views are not reflected, and policies are made in closed rooms.

One environmentalist provided a view of how the policy making process should take place, and in particular how environment policy should be made. *“If any policy is to be effective in a country, you need to have a process of mutual consultation. And that consultative process will bear fruit because you get ownership, consensus, often you get the best minds focusing on the issue. To really have application and ownership, you need to have a really good consultative process, a series of discussions between government and civil society. And if you look at the policies in Pakistan that have taken root, they have gone through a process of consultation either at the provincial level, and through the federal parliament, or through a process of consultation which has involved civil society. One of the good examples of policy formulation was the National Conservation Strategy which we took through the government over a period of 3 to 5 years, and then rolled out as provincial strategies and then eventually became Pakistan’s Environmental Plan. The provincial strategies became the Provincial Environmental Plans they were responsible to generate the Environment Protection Agencies, the environmental protection departments, and then simultaneously and in parallel, all the environmental legislation which followed.”*

There is no doubt that there is a policy planning process which exists between the provinces and the federal level, and that the provinces are able to include their views in this process. The issue is that the senior level decision makers are not always included in discussions, and should always be included in policy related meetings, so that their experience and knowledge can inform the policy making process. It is also essential that policy related discussions are inclusive of all stakeholders, particularly the local communities, whose views should be reflected in the final documents. Effective implementation of policy will only take place if there is a sense of “ownership” among those who will implement it. Policies must lead to Action Plans and be translated into projects, with clear strategies for implementation at provincial and district level. Thus, effective policy making requires a mutual consultative process between government and civil society, through a series of discussions to develop a consensus among all relevant stakeholders, so that implementation can be ensured.

1.1 Who develops the rules, and guiding principles for climate change policy?

The responses to this question generated a discussion on the Climate Change policy, and respondents at the **Federal** level stated that since the Ministry of Climate Change had been established this signified the government’s priority to the issue of Climate Change. They said the Ministry had gone through a process where the Climate Change policy was formulated in consultation with the provinces, NGO’s, the private sector, and various communities. The process began in 2010; the Draft policy was prepared in 2011 and then presented to the Advisory Group on Climate Change. This was during Pre Devolution and the Advisory group on Climate Change and Sustainable Development prepared the 1st draft of the policy and the group consisted of experts from the government, civil society, and the private sector. This draft was circulated to the provinces and all local government departments were involved. The Planning and Development Department, agriculture, and forest, depts. were involved in the process as

well. It was a broad based process which also included AJK and all the provinces. AJK was considered extremely important because of the glacial melt which is a result of climate change.

The Climate Change Policy was presented to the Cabinet on 5th March with minor recommendations, such Clean Development Mechanism, and illegal trading in timber. All the feedback has been incorporate and approved in principle by the Federal Cabinet. The Policy provides guidelines action plans and national plans of action have been formulated in consultation with the provinces. Now provincial plans are needed and the provinces must make their own interventions for implementation. Also the Ministry of Climate Change leads the process, and there are provincial counterparts like the Additional Chief Secretary in all provinces, so there is a structure in place for implementation. Once the National Plan of Action is endorsed by the Advisory group it goes to the provinces. Then it depends on how pro-active the provinces are and each province is different because they have their own priorities and strengths. The results are also linked to the 18 Amendment because post 18 Amendment practical implementation is the responsibility of the provinces.

However, in contrast to the view at federal level, most respondents of the **provincial government** said that the Climate Change policy had not been circulated and this should have been sent to all the relevant organizations. And the policy has only been approved by Cabinet and has not been notified as yet. They added that at the provincial level a Provincial policy is needed because Pakistan is a very diverse country, stretching from mountains in the north to coasts in the south, therefore each geographic area needs a specific focus. A general policy cannot be imposed on all the geographical areas in the country. *“We talk about vulnerable communities who are located in Badin and Thatta, and who face the threat of cyclones. We have to look at the vulnerable communities within the whole province.”*

Certain reservations were expressed regarding climate change, and the role of the Ministry of Disaster Management who it was felt deprived the provinces, because the Climate Change Cell remains with the Ministry of Environment or the new Ministry of Disaster Management. It was also thought that the Ministry at the federal level avails all the facilities, donor resources, and capacity building, so the EPA's in the province have no idea of climate change. It was also stated that the Ministry of Disaster Management is not the automatic successor to the Ministry of Environment, and the provinces should be involved and consulted in the process of change. Environment Protection is already with the provinces, but climate change, and the Ozone Cell is still at federal level. The strength remains at the federal level, and there should be a high level body consisting of the Federal secretary and Provincial secretary who are empowered to make decisions. And there is too much duplication in the policies, there is a Sanitation Policy and a National Environment Policy, there should be a basic document to control all climate change activities, a real Action Plan.

“The current climate change policy and new Ministry are still at federal level it has not come to us as yet. We have to find common ground and support each other.” The rainfall in 2011 was devastating and of 80 – 85 % of cotton production was lost, and the farmer could not recover his cost. This unusual rain was due to climate change, and the 2010 floods were the worst in history. This is not normal climate, and in addition the winter of 2011 was longer than usual and the mango crop was 30 to 40 days late, all this is a reflection of climate change. Therefore we have no option but to recognize climate change but the government is not working on this and it needs to be “awakened”. The Planning and Development dept. is not an implementation agency with the means to deal with climate change, and there is the political configuration which is the bottleneck.

Therefore, in the absence of inclusion of the provinces, one dept. said that since there was no climate change policy they took all the pre-floods measures on their own, since the climate change policy had not been given to them for guidance. And from 1999, 2003, to 2006 the focus of development has been on irrigation guided by mitigation of drainage cover because of floods. The level of investment has increased and long term measures like strengthening the Sukhar Barrage to withstand the flows, for the next 500 to 1000 years, is taking place. Flood management and managing the waterways is being done on our own not through the federal govt. We work on observation and our needs and change our criteria as we think necessary. No policy guidelines are given to us there is no flood management policy, just look at the level of sea intrusion. In this context, climate change schemes will either go to the Provincial Development Working Party or District Development Working Party who will approve them and then the Secretary of Environment will implement these, in a result oriented manner.

And yet, another department at provincial level said the Climate Change policy document *“is with us at provincial level. The National Climate Change policy was received 2 months ago. But climate change has no place in our priority just now although there are plans to look at it this year.”* The floods and rains have had an impact so we are going to give it priority this year. The provincial Environment Department the Environmental Protection Agency and Planning and Development will discuss the policy to see if the climate change policy is viable for us, to see if it is worth investing our time in. We will examine it later. At the moment we are in the post budget phase and have to send our comments to the Federal government, then to cabinet to get approval. Then we circulate it back to the provinces and make Action Plans which lead to projects. We have to see what the vulnerable areas are and decide on interventions in irrigation, or agriculture or wildlife. We further analyze the policy for investment purposes, because we need to understand the concept of climate change. At the International level we hear about climate change but we are not aware of it properly. What is the loss to our agriculture, and crops, we need to know for sure.

Civil society respondents claimed that there had been no broad roll out of the Climate Change policy, and although institutes like SDPI and LEAD are taking the lead on climate change issues, and the Environment Ministry has been made the Ministry of Climate Change, in the past the Ministry of Environment emerged from the National Conservation Strategy as a strategy, the strategy came first the Ministry came second. In the present scenario in the Ministry of Climate Change there is no coherent umbrella program and no clarity on adaptation or mitigation in the government today. At the moment there is no clear understanding even among the donors and *“we are not on one page, there are ad hoc decisions being made, there is no policy framework, no coherent policy, and no consensus and ad hoc initiatives so vested interests move in.”* A policy application needs to go into an Act and be made into legislation, but the climate change policy has not been made public yet, so until then nothing will move forward. There are three arms of the government the legislature, the executive and the judiciaries which influence the way policies are made. Even the legislatures are involved in issues raised in policy the elected representative and even the donors play a role in funding development, and climate change is a fashionable term. There is a climate change Task Force a Ministry and various organizations like SDPI is doing research in Pakistan. Climate change is also non controversial so people have bought into it. The Climate change policy has not been publically disseminated as yet, and Pakistan is a hot spot for climate change. If we juxtapose the terrain and climate change we have seen signs of floods and droughts, so what will this policy address? The Ministry of Climate Change is not as proactive as it should be. Pakistan needs to take a position; we are listed as one of the most vulnerable to the impact of climate change. The Ministry of Disaster Management has become the Ministry of Climate Change, and a change in the name is not enough. In the process of developing the climate change policy, no in depth

consultation have taken place, the coast is very vulnerable and is affected by floods, droughts, cyclones whose frequency has increased. There are no studies on this and we cannot make a uniform policy for all geographical areas. The infrastructure has also been ignored. The floods their impact and affects have not been reflected in the plans or in the climate change policy. Climate variability, temperature changes, country risk profiling, we have no local data on these issues, so in the absence of basic research how can you make a policy?

Respondents from **academic** institutions who had been involved in the process said, the Climate Change policy does focus on coastal areas, and also on gender, and disasters, and recommends capacity building across the board. The National Sustainable Development Strategy is being taking to the Rio +20 conference. It focuses on water, environment, forests, and the climate change existing policy was also included in the formulation of the NSDS. Climate change policies and strategies are formulated at federal level and taken to international conventions. Resources are also required for this purpose. There is a national climate change fund in the climate change policy which is supported by the Annual Development Budget and the Public Sector Development program. Although currently there is nothing devised for climate change. As far as I know the policy making process involves Ministries at different levels and there are implementation issues. The last MTD Evaluation was done by PIDE and the 11th 5 Year Plan PIDE was involved and some of the researchers were invited to participate.

A Core group was established keeping in view the international negotiations related to the UNFCCC negotiations for 17th Round of meetings. This continued for the 18 and 19 Round, the Ministry of Environment took the discussions to Copenhagen. In this process NGOs, PIDE, academics were involved. The Core Group still functions but post Devolution it is not very active they are more now just an Advisory group. The Core group met to discuss the critical issues and the Finance Ministry was also a part of it. Pakistan's position was put forward in terms of vulnerability, adaptation, and mitigation. The Global Center for Climate Change formulated the agenda and the Ministry of Climate Change made the policy, I was involved in the process.

The Climate change policy has been approved by Cabinet and Action Plans are in process, but changes in the Ministry have taken place. So the main issue is how to implement the policy. There are adaptation issues, critical issues such as green growth policies, and new technology, how do we finance these issues? The process was participatory the provinces were invited and the Planning and Development depts. at local level and Provincial Environment Ministries were also involved.

However, the **INGO's** were aware that the Ministry of Environment had begun the process of formulating the climate change policy. They knew a Task Force was created supported by CSO's the UN agencies, the author of the Climate Change policy who were included in the process. They also gave credit to the Ministry of Environment who led this participatory process, and felt it had been a consultative process and the provinces were involved as well. The challenge is how the provinces will take this forward towards implementation. It appeared that UNEP is taking the lead along with the UN agencies under the 1 UN initiatives. Guidelines are being taken from the policy to action at provincial level and funds from the private sector are also being sourced. UNEP is in dialogue with private sector for resource mobilization. The Climate Change policy is currently Cabinet approved with some observations to be addressed. And now that Pakistan has a climate change policy only one element has been achieved, we need a climate change Adaptation Plan at provincial and district level.

Certain **academic** institutions were also aware that a workshop was held in Karachi in 2011 on Climate Change and they provided technical input. They also identified some shortcomings in

the water sector related to floods, and some core issues were missed in Sindh such as the drainage problem, stagnant water after floods, no storage reservoirs, planning and anticipating floods, implementing the Pakistan Environmental Policy, the National Environment Quality Standards, and there is no micro biological criteria in the report. *“Our input was accepted and the workshop was participatory, we have been involved, and have also been involved in the climate change process.”* But in terms of policy making there is no proper understanding of the anthropogenic activities at the federal level and the policy makers are far removed from reality. There should be a bottom up approach from the people since the communities know what they are doing and the information should flow from the grassroots to provincial and then federal level. The Meteorological department and SUPARCO collect information which is provided to the federal ministry and into policy, but the policy remains on the shelf and there is no implementation. And finally the few **donors** who were included in the study said they had not seen the new climate change policy.

The establishment of the Ministry of Climate Change signifies the government’s priority towards this issue. However, the first step toward mainstreaming Climate Change is for the Climate Change policy to be made public, and disseminated as widely as possible to all stakeholders. Then Action Plans should be developed in consultation with the provinces, which must make their own interventions for implementation. The Ministry of Climate Change should lead the process and support the provinces in implementation. Individual provincial climate change policies are needed because of the geographic diversity of each province which will require a specific focus on the coast, dry lands, mountains, and riverine areas and the local communities living in these areas.

Changing the name of a Ministry does not necessarily mean a change in priority, or a shift in authority, which remains at the “top” and does not reach the provinces. Training, capacity building and technical expertise has to be developed at the provincial level, so that the provincial officers can develop a knowledge base related to climate change. So although climate change has been recognized as an important issue, not enough is being done, and not fast enough to prepare for its impact. A common understanding of what climate change really means, scientific data to measure its impact, resource allocation, greater awareness, and clarity about the concepts of adaptation and mitigation are necessary to pave the way towards mainstreaming climate change.

1.2 Where is this located within government?

In terms of where the policy making process is located, the respondents in the **provincial government** departments said that Forestry is a provincial subject, so are marine issues, so plans are made at provincial level. But EIA’s are not implemented. In Forest’s the Inspector General of Forests is the controlling and coordinating body for the country. The Sindh Forest Department is based in Karachi and Quetta and the secretaries are also there. The Coastal Development Authority Sindh and Baluchistan is a coordinating body only, and not a regulatory body. The EPA is a regulatory body which is there to uphold the law. A Plan is a tool with prescriptions and suggestions to the concerned departments. The DMA has the mandate to make plans within the provinces. They have to ensure no one works in isolation and there is no duplication.

Policy making takes place at the Federal level, and after the 18th Amendment the provincial governments have the authority to develop individual policies and plans. However, duplication within policy and of policies should be avoided.

1.3 Who is responsible for drafting proposals for climate change projects?

Members of **civil society** thought the elected representative are responsible for all policies and they should reflect the needs of the people, but this does not happen. Regarding climate change policy they stated that did not know anything about this policy so far. "*We know it exists but how was it made?*" The respondents said that usually when the government comes under international pressure they make a document for funding, but there is no political will and commitment to bring it to the grassroots. No research has been done at the coast, we know the monsoon patterns are changing but there has been no research on this issue which is useful for us. The Environment department should be cross cutting but it has been departmentalized, so WWF, IUCN, and civil society should pressurize the government into action and climate change should not be a separate cell but integrated into all departments.

The political process and elected representatives are also responsible for and included in policy making. Hence, they should reflect the needs and views of their constituency. Political will and commitment, accountability, and transparency are all essential elements of an effective policy planning process. And integration of climate change as a crosscutting issue is necessary across all departments, since its effects are felt in the social, economic, and financial sectors.

1.4 Who is responsible for developing adaptation plans, in the context of climate change?

Similarly, **provincial government** representatives said, there are no plans for climate change adaptation in place yet, because this would require a shift in cropping patterns which cannot be done easily. The departments are responsible for implementation for Action Plans and policies. There is no debate on adaptation. Fifty years ago 80% of riverine areas were forested and we could throw seeds and trees grew naturally the soil was so fertile. Mitigation measures come into agro forestry in high lying areas the canals are getting less water and the canals have to be lined. No changes in terms of infrastructure have been made to deal with climate change. There is need for a proper public policy on climate change. These issues cannot be separated from governance issues where we need dedicated individuals.

If the forests were used properly the Forest department could give revenue to the government but no joint decisions are made and in all the institutions there is no interest no accountability. Among the **CSOs**, it was stated that IUCN has a climate change program, but adaptation is not financed, the initiatives are all scattered. The coast is vulnerable, and although IUCN is working on coastal resilience in Baluchistan, on water conservation, with mangroves in the lower delta, and restoring the karez systems which are all adaptation measures, the environment scope is so vast that it is essential to collaborate with government line departments and raise awareness among them.

Those within the **academic** institutes said that adaptation should focus on agriculture and develop the crops which are resistant to the increase in temperature and heat and be prepared for the increase in pests which will breed in higher temperatures. So we may have an outbreak of pests, so we have to find ways to minimize the growth of pests. This is adaptation, we may have to explore GM foods, and Pakistan has begun importing seeds. There is more climate variability now, dry and wet seasons so we have to adapt.

Adaptation plans cannot be made in a vacuum. So the emphasis is again on understanding what climate change means, what the policy says, and then to focus on adaptation. Since adaptation takes place at the local level, this is where it is extremely important to include the local communities, their perspectives and knowledge, into making adaptation strategies. Initiatives should be coordinated, information shared, and collaboration with government line departments is important. Working in isolation is detrimental to the vulnerable communities who need the information and training to make the necessary adaptations at the local level. Adaptation measures will vary with the sector concerned. Coastal adaptation is not the same as what is required for agriculture, so the challenges also differ in terms of action required to meet the uncertainties of changing weather patterns.

1.6 Who is responsible for implementation of the policies?

According to those in **academia**, the government is responsible for implementation of all policies at Provincial and Federal level. And the **provincial** department's respondents said the Planning and Development Dept. is the focal point for all financial implementation. It funds the measures to implement plans. Therefore there should be a focal person in the P & D to deal with climate change. In terms of policies it was said that within the national environment policies there is too much duplication and not enough implementation. One respondent said *"I have been on this assignment for 6 years, and it is the local government, like the Karachi Water and Sewerage Board who are the implementers. Policy is philosophical, the Action Plan is the implementing instrument, and the policy stays on the shelf. It is the local authorities that make it happen at the local level."*

Implementation can only take place if there is knowledge and priority, and regarding climate change in 2011 / 2012 the rainfall led to floods, so the priority should be on rural development. The poor are vulnerable, but rural development has no mandate in provincial departments, no funds, so the poor are further marginalized. All these are implementation issues. The other issue is sea intrusion which is linked to the water downstream of Kotri. The Coastal Development Authority has no clear path or direction, and there are only a few minor projects, whereas we need infrastructure, and protective infrastructure like dykes etc. and finally, there is an absence of knowledge about climate change. Since we do not know the impact of climate change on the various geographical areas of Sindh, and only a layman's knowledge exists with government at provincial level, implementation becomes ad hoc and disjointed.

The main challenge to the policy planning process is implementation. The lack of implementation is the main issue which leads to the failure of legislation, plans, strategies, and policy, so failure to implement action plans makes the policy irrelevant.

1.7 Is there a focus on Gender in the National Climate Change policy?

Since most of the respondents from **civil society** had not seen the climate change policy, they had no idea if gender had been addressed. But the general opinion was that usually policies ignored women, and the Fisheries policy was cited as ignoring the fisherwomen who are involved in net weaving, which is not reflected in national policy and in some cases the national policies have excluded and displaced the fisher women from the traditional way of the fishing, and the policies have deliberately excluded women. Regarding the climate change policy, only those respondents of who had been involved in the consultative process said there is an emphasis on empowerment within climate change and alternate livelihood options are being considered, and in the discussions women in agriculture and fisheries has been mentioned. A

view of gender was also that “*when donors give money the government is forced to pay lip service.*” However they did say that gender is a focus in the humanitarian response but not anywhere else. Gender is also included in other development policies, but there is no implementation, and no knowledge of how to access the legal framework, and there is fear of opposing the prevailing cultural attitudes.

Members of the **provincial government** were also unaware if gender had been included in the policy, but thought that trainings on gender were needed, and in a small way mainstreaming gender has begun but there was little coordination between Women Departments. Gender has only been discussed there is nothing on climate change the action research has to be shared with us. Those interviewed in academia agreed that gender is not visible in the policy. The INGO's had a different perspective. They thought that gender environment and Disaster Risk Management is a cross cutting issue but exists only on paper. And although gender awareness has increased there is still much to be done, and there is very little implementation due to cultural barriers. There is no focus or awareness of gender issues, the linkages between women and climate change has not been made. A women's role in climate change has not been understand or defined, and climate change and gender has to be related to the situation in Pakistan. Resources are very few, the Environment Ministry did not get its share but now that Climate Change is an issue so important basic resource requirements will have to be met.

Gender is a crosscutting issue, which invariably gets neglected in the policy making process. Women's interaction with the natural resources and as managers of natural resources at household level is often ignored, and as a result women bear the brunt of natural disasters and in this situation the impact of climate change. The nexus between women and climate change has to be understood, women's role in climate change has to be defined in the local context, and factual evidence of these linkages must be collected so that gender can be included in climate change mainstreaming. The lack of implementation of existing policy related to gender is again an issue which prevents progress, which when compounded with cultural barriers relegates gender issues to the fringes in a policy. Hence, awareness, trainings, research, and gender sensitization is required to mainstream women within climate change.

1.8 Is there a focus on Climate Change in national development policies?

Government respondents were candid in their view. They said it is a question of governance, the quality of bureaucracy and leadership. We have a dilemma, who will guide us in terms of actions required to be taken for impact of climate change? Vision 2030 does mention climate change. At the Ministry of Climate Change we coordinate and liaise with other departments and also participate in the meetings. We call all the stakeholders and do the coordination.

Similarly, **civil society** and **academia**, said there is passing reference to climate change in other development policies, but generally the government is more interested in carbon miles to encash and there is no long term mitigation in policy, or political will. There are references to climate change with no conceptual or intellectual linkages. The only policy document mentioned which referred to climate change, was the Vision 2030, but CSO's acknowledged that since climate change is a recent phenomenon all policies prepared earlier have no reflection in them. Therefore, new policies are looking at climate change such as the Wetland Policy, and the last 5 Year Plan also mentions climate change, but the important factor is that all old policies should be reviewed to include climate change, new one's should focus on it, and national policies should be realigned to include climate change in them.

Policies prepared in the past, and especially before the establishment of the Ministry of Climate Change and the draft Climate Change policy does not address climate change. Therefore there is a need to realign previous policies with climate change, and to integrate climate change into new ones.

1.9 How is allocation of financial resources to the provinces decided?

According to the **provincial government** respondents, the NFC Award decides the distribution of resources. And within the provinces there is the Annual Development Program but the utilization is poor. The federal government has its public sector program, but planning is a problem, and in terms of priority the opinion was that the focus should be on infrastructure development. It was acknowledged that Climate change is missing from this process. However, it was also said that at provincial level we do not have financial problems because the allocations are in the budget. And once approved the funds are released, we certify them. The Planning and Development makes the budget in the Annual Development Plan and Provincial Cabinet approves this after the federal budgets are announced. Approximately 10 days later the Sindh Assembly approves the budget. We are trying to get climate change into this process too. According to the Sindh Revenue Board 90% taxes are collected by the Center, and NFC grants and cash development loans are the source of revenue. Post 18 Amendment the NFC has a formula by which the provinces get their share. GST on services is now collected by the provinces and this is a positive for Sindh there is no shortage of funds.

Members of **civil society** were unaware of any formula, but thought that not much was allocated to the provinces, and it was located in the Finance Ministry and the provinces have to push for it. People have to ask for the resources and then they will get it. Every year the provinces develop an Annual Development Plan. This is called the Public Sector Development at federal level and no matter how dire the eco situation is a 10 to 15% increase is expected so the national debt is increased but there is no quality of output or benefit to the people, and their vulnerability has increased. Each year the Development Plan is prepared by the Planning Commission. The PSDP is a large program that needs federal level approval.

Similarly, **donors** thought now the provinces had authority to make policies so they could make the PC1 and some of them felt there is more money, but it is to be seen if they really get more financial support. In the **academia** they knew there are development funds and non-development funds and funds come from the Federal level to the Provincial governments.

Since the 18 Amendment allocation of financial resources to the provinces is supposed to have increased, so support for climate change should be included in new allocations. However, generally the utilization of resources has been low, and the choice between infrastructure and intangible projects will have to be made. Investment in changing attitudes which is behavior change and required for adaptation practices will have to take greater priority if climate change is to be addressed.

1.10 Who is responsible for the disbursement of budgets?

According **provincial government** respondents, resources for all provincial budgets have to be approved by cabinet, and then circulated to the legislature to be discussed. The Chief Minister and MPA's discuss the budget, and then the budget is announced and after that the relevant departments formulate the new programs. The Department for Development Working Party

(DDWP) the Secretary has the authority to approve new schemes, and after approval, the finance department releases the funds. Each department prepare schemes which are sent to the Secretary, and then to the ACS. Financial allocation is taken from the finance department.

Budgets are made by Planning and Development and Finance department in all provinces. Planning and Development approves the plans and the Annual Development Plan is approved by the Finance department who release the funds as per request as per plans submitted on a yearly basis. There is also a political involvement and the professional element is also there, but there is a system here which works. A Public private partnership within the finance department has also begun; the Hyderabad to Mirpurkhas road was made by a Korean private company so there was less corruption.

The **civil society** perspective on budget disbursements was that the Provincial budget is discussed in the Assembly, and there is a fixed formula in the NFC awards. Allocations are made according to departments; there are development funds and non development funds. When the Annual Development Plan is approved this becomes part of the budget. Then the Planning and Development Finance Department releases the funds. However, there was a view that there are no specific funds for disaster management, and when funds are allocated by the federal to the provincial level these do not reach the ground. According to a respondent from the fishing community, in Musharrafs' government a model village for fisher folk in Badin near O point was supposed to be made. The model village is incomplete, the houses are damaged, the allocation to this project was huge, almost 2 Arab corers and funds were allocated but no work has been done, it is all on paper. Those in academic institutions were aware that the finance department allocates resources and ECNEC the economic commission in the P& D approves the component of the budget to the provinces.

The process of budget disbursement is an established system, and follows a routine procedure, although political influence also leads to the misuse of funds.

1.11 How has the 18 Amendment affected the policy making process, in relation to Climate Change?

The 18 Amendment is a controversial and challenging process. Responses to this question ranged from positive to negative opinions for this process, but all respondents agreed this was a huge challenge for all the provinces.

At the **Federal level**, respondents felt that in relation to Climate Change the policy making process began before the 18 Amendment. And the main challenge is the lack of capacity at the federal and provincial level to manage the implications of the 18 Amendment. Climate change is a new phenomenon, and not well understood. There is no clear understanding on adaptation or mitigation and no common understanding at government level, and a complete lack of understanding at the grassroots. In reality, not much change has occurred, and the provinces are supposed to develop their own policies.

At the **provincial** level where the effects of the 18 Amendment have been felt, respondents said that the federal government was not ready to transfer funds to the provinces, and the provincial government had to use its own resources, so revenue is also required. Some Ministries and Departments have been dissolved but no specific policies at provincial level have been made, because *"we do not have the capacity to deal with the post 18 Amendment outcomes. The programs which have been given to us and some schemes have come to us in bulk, education,*

health, agriculture, and we have to continue them from our own budgets. So to manage these is a big burden and we are not able to accommodate this. It is a difficult process and will take time. It is a slow process; the Budget for 2011 / 2012 has already been made so we had to take finances out of our own pools and accommodate the changes. Operation and maintenance will also be a problem, as for the infrastructure that comes with the schemes how will we manage? We will have to put it into the next year's budget and give it space and accommodation. There are also financial and operational challenges as well. The programs were conceived at the federal level we have no history or background of the projects or the schemes, so we go by the document but we have no basis to complete the projects. We have not been given the PC1 so we have nothing to guide us. We need to know what has happened in the project and what needs to be done, we must know and we have no records of the past, they have not sent been sent to us in an organized way, we have no briefs to work with, so how can we implement these projects?"

Another respondent added, that the impact is not visible yet, and national environment plans are still at the Federal level, although some inter agreements have been made. The old way continues although in some cases more resources are available. It was suggested that there should be an overarching institution at federal level to manage the transition. *"So as far as the Post 18 Amendment goes, there has been no change in thinking no realization yet to what it implies, because the officials are used to direction from Islamabad."* As one respondent said, *"the concept of climate change is too early for us; we understand DRM but not climate change as yet. So each province will respond differently. Among the challenges first the policy has to be unfolded and owned by the stakeholders. And until there are province level policies as well, how will this work?"*

The view of **civil society** was that Post 18 Amendment there was a gap for at least a year but now things have become clearer. The key people remain the same the name of the Ministry has changed, and so there is a need for an Action Plan. Right now the focus is on Rio + 20, and not on the provinces. In the post 18 Amendment scenario, it was stated that there was confusion in all departments, because the responsibilities have been transferred on paper, but no allocations have been made. The Ministries have been merged, there is no proper decision making and the historical memory is broken. The old system Pre 18 Amendment has been eroded and now there is total confusion. One respondent said, *"Provincial autonomy for whom, for the people or for the feudal landlords? There is no visible change, so what devolution is this?"*

Other respondents, who supported the 18 Amendment, and said that provincial autonomy was an old demand that the provinces should have the power, but they need to be prepared for this change, and although the Ministry of Environment has been devolved, it has created confusion. The provinces have been delegated responsibilities but the federal level still retains the power and the subjects have been distributed among the Ministries. On paper it is devolution but in reality this has not happened, and the provinces have been given a mandate without the resources. All the multilateral environment agreements are still the responsibility of the Federal level and the focal persons are also at the Federal, but the subjects have been devolved to the provinces without the focal points, so there is a vacuum at provincial level. Devolution has happened but the provinces have no funds or the skills set needed for this change. The Ministry for Environment already existed, so why another Ministry of Climate Change, devolution is pushing up new ministries.

The **INGOs** thought this was an ambitious process, and there are many gaps. The Planning Commission is not clear about how the provinces will make their policies and the debate is still on what can the province do? There is no clarity because in a way the 18 Amendment has

broken the process and no one seems to know what will happen next, what these policies will look like at the provincial level, there is confusion, and in one province there are 2 systems of local government. So it is a huge challenge.

One Disaster Management respondent thought the 18 Amendment had changed the focus within government because previously the provinces were reluctant to engage in implementation, and now the focus is on the provincial departments of the provinces, *“and Sindh has the weakest capacity. In KPK and Punjab the capacity is higher for reforms and reviews and institutions exist. In Sindh there is a huge difference between Karachi and the rural areas, where there is no capacity so the urban rural disparity is great, there is no uniformity, and the government is not proactive and not perceived as proactive and under political influence.”*

Those in **academic** institutions had the same concerns regarding the implications of the 18 Amendment. They too thought that since climate change is being “looked after” by the Ministry of Environment which is now the Ministry of Climate Change, and a few organizations are focusing on the impact of climate change, and different subjects have been devolved to the provinces, the question is *“who will implement the policy at Federal level, and then at Provincial level? And before any of this can take place, the policy has to be made public.”*

The 18 Amendment has presented many challenges to the provinces, mainly in terms of implementing the requirements of the process. The lack of capacity at both the federal and provincial level to manage the changes this process has raised to effectively devolve the subjects to the provinces has led to confusion in the provinces to manage this increased work load with limited staff and resources. The continuity of a programme or a project has been disrupted since they were conceived at the federal level and now have to be completed by the provinces, without clear guidelines or briefs to work with. In this scenario climate change is a new concept and needs a clear understanding of how it will be integrated into the work of the line departments, and across the sectors.

1.12 At the Provincial level what changes have been made to adjust to the impact of the 18 Amendment /devolution?

In terms of adjustment to the 18 Amendment, at the **provincial** level the respondents thought some minor adjustments had been made but there is no strategic thinking. Most civil society said, the responsibilities have been devolved to the provinces, but climate change is still viewed as a federal subject. The **donor’s** opinion was that a few consultations had taken place on policy and a few Action Plans were in process, but not much had changed. Similarly, **academia** said directives have been issued, there has been a shift of government institutions, and responsibilities have been given to the provinces, but no adjustments were visible.

It is too early to assess if changes have been made to adjust to the outcomes of the 18th Amendment at the provincial level, since there appears to be no clear strategy on how to take the process forwards, and climate change is still perceived as a federal subject.

1.13 What are the current challenges you face in terms of implementing climate change policy?

Since climate change is a new concept, the **provincial respondents** emphasized the need to understand the impact of climate change, technical knowledge and information to understand

the effects within Sindh. As a new concept staff needs capacity building and there is the need for experienced staff to be transferred to the provincial level. It is also important to remember that priorities at provincial level are different. Roads, schools, and basic needs are the first priority; there are issues of poverty, which are more important at this stage. *“The people want food, and employment not climate change. The poor want a link road to access the city, and they need jobs.”* Climate change is holistic so there has to be information and knowledge, plans, and capacity to enforce those plans, supported by revenue. The main challenge is to review and look at all the current policies and bring them in line with climate change. This will also require realigning resource allocation.

Civil society identified the challenges as a plan that filters to provincial level, and is part of the annual planning process. Technical expertise and matching funds are not available. And the main impediment is those who in the policy making process are part of the Parliament, the representation is feudal so there are vested interests. So *“why should they implement the policy, when they are the legislator and the policy maker”*. Thus the main issues are feudalism and religious extremists which is another challenge as well. These two strong groups exist in our society, and we cannot speak against them. If we want real change then we have to deal with feudalism and extremism. *“We do not address these issues because we are in a minority. We need to have strength in numbers; we are too small to oppose these forces.”*

Both **INGOs** and those from the **academic** institutions said implementation is the main issue. They also identified capacity building, inclusion of stakeholders and the communities and understanding traditional ecological knowledge as essential for implementation. They thought that environment is still not a high priority so climate change is not an issue, and it should be part of the national agenda particularly since Pakistan is an agricultural based economy and depends on water for its agriculture. They added, that the country will not progress in the current water scarcity scenario, which also leads to interstate and inter provincial conflict, so climate change should be considered in that perspective as well. If climate change leads to more rainfall then we have to adapt to the changes which are different in the north where there are glaciers and in the south where sea level rise is the issue. So adaptation practices are also different, this too is a challenge.

“Mainstreaming is a process rather than a goal that consists in bringing what can be seen as marginal into the core business and main decision making process of an organization.”
(UNESCO 2003) Therefore, the impact of climate change, clarity of what adaptation and mitigation means in local situations, the ground realities of a diverse geographic country, the dearth of technical knowledge, research, and information, are among the main challenges for mainstreaming climate change. Other factors such as basic needs, poverty, security issues, and social and economic aspects compete as a priority to climate change. In addition, there is an urgent need to review past policies and realign them to include climate change, and to support this with appropriate resource allocations. Implementation has been weak in the past and unless this is ensured climate change will not be mainstreamed effectively in policies and at the level where the impact is felt the most, which is among local communities. Mainstreaming will also require a consultative and participatory process with the inclusion of all stakeholders, and a genuine incorporation of their perspectives into action plans. And finally, adaptation practices must be tailored to different situations based on geography, weather patterns, crops, and the communities living in these areas.

1.14 How do you allow for mainstreaming of climate change in national development policies?

In response to the possibility of mainstreaming climate change in other national development policies respondents at the **provincial** level said that it depended on who leads the policy process. The Forestry Policy was led by the Ministry of Environment and supported by the Dutch. And any consultative policy should be a “bottom up” approach and the biggest problem is that everything is done at the federal level. This should be the other way around, from provincial to federal, because operation, priority, implementation and resources are all at the provincial level. The **donors** opinion was that Disaster Risk Reduction, gender equality and environment are cross cutting issues in the humanitarian response, so climate change should also be a cross cutting issue. And there should be a focal department to lead the process.

To mainstream climate change across other policies needs an individual to lead the integration process, it would require a consultative approach with the provinces and stakeholders, and climate change should be seen as a cross cutting issue.

1.15 How is gender mainstreamed into national policies, projects and budgets?

At the **provincial** level, it was said that gender is the responsibility of the Women Development Departments, who unfortunately like the environment department, work in isolation. **Civil society** thought that there is a focus on gender because civil society stakeholders are more active in the process. And in their opinion, women and environment should be a central theme in all policy, budgets, and projects. They stated that the Water Policy is gender blind, the Fisheries Policy ignores women. There is very little input of women and they are not involved in the policy making process. Efforts have been made but mainstreaming gender is difficult. Similarly, the **donors** thought that gender has not been mainstreamed enough, and although efforts have been made not much has been achieved. The **academia** acknowledged the inclusion of women in reserved seats, and in government organizations there is allocation for women in terms of equality in employment in urban areas, but mainstreaming into policies, budgets, and projects, was not visible.

To mainstream gender in the context of climate change would be to make women and environment a central theme in all policies, budgets, and projects.

1.16 What are the issues in the policy implementation process in relation to Climate Change?

According to the **provincial** government respondents, at the macro level it is easier to implement the policy, but at the micro level it will take a long time. This is because capacity building is needed on climate change, facts have to be developed, to understand climate change and only then can we move forward. The causes and effects must be related. Planning and Development is the forum but each department has its own area of work, and there is limited sharing of information.

Implementation at macro level is easier than at micro level, because at the local level there is a need to develop a greater understanding of climate change

1.17 How do government departments coordinate the implementation of climate change activities?

According to the respondents at the **Federal** level, Coordination exists, and the Advisory group comprises all the relevant ministries and there is a fair level of communication. The Economic Affairs Division also coordinates the departments. This requires attention the coordination mechanisms do exist but they need to be strengthened. Climate change is a business of several Ministries and the inter ministry forum exists which needs to be revived. The Prime Minister's Task Force should be continuously involved in differed issues. But there is no participation of the provinces so this has to be a provincial level task force and district level committees.

However at the **provincial** level, it was thought that there is no inter linkages within government departments, and at this stage there are no activities to coordinate, but once the climate change policy was shared with the provinces, then it would have an Action Plan with certain benchmarks, which would be followed. Degradation of the mangroves was mentioned as the mangroves are being cut but the Fisheries department is unaware, and the wildlife department is not concerned. One respondent said, *"when a project is conceived a Steering Committee is formed, for example in agriculture we include the Universities, WWF, CSO's and IUCN so that fruitful discussions take place and government departments like forest, and health, are also included. The mechanism is that the Steering Committees findings are shared at the workshops and seminars and the media is invited. But this is not always possible because there are issues between departments, political differences, and different opinions so conflict occurs."* **Civil society** stated that there is no coordination among government departments, fishing, wildlife, environment, and the forest department all work in isolation. There appears to be no coordination, there are methods to minimize losses but the people are not told how to adapt to changes. This winter the agricultural department gave them no information about the cold wave, and the district and provincial level representatives have no technical knowledge of how to deal with a change in weather patterns. It was also mentioned that the flow of information is slow and it is hard to get relevant people engaged. There is also conflict between departments, those with and without authority, and there is tension unless there is a powerful personality in place to coordinate and to get things done.

The **INGOs** had the same opinion, that coordination depended was personality specific and not institutionalized. *"Information is not shared within departments, so how will they coordinate with each other?"* The same opinion was reflected in the academia who added that, there is no data sharing everyone works in isolation within government departments. In government some Secretaries coordinate and some do not, but there is no adequate coordination in government departments as an institution because of the attitude of different officers.

Coordination mechanisms need to be strengthened, and since climate change is a cross cutting issue and would require the inclusion of various departments, a mechanism where all relevant departments can communicate with each other both horizontally and vertically should be established. Government departments tend to work in isolation, and there is a low level of information sharing between and across departments. Interdepartmental conflict, and personality clashes which adds to the isolation, and so coordination should be institutionalized and not left to individuals.

1.18 In your opinion who are the other major stakeholders involved in climate change projects in Pakistan?

The main stakeholders were defined by **Federal** respondents as; the provincial government, civil society, senior policy makers, the private sector and the industrial sector. They also thought that the private sector should be engaged to mobilize resources because the communities bear

the main impact of climate change and women and children are the most vulnerable. **Civil society** named the government, vulnerable communities, coastal and riverine people, those who lived in the tail end of the canals, in deserts and dry land areas. Organizations like LEAD, IUCN, WWF, Oxfam, SPO, and the private sector were all considered stakeholders. **Donors** mentioned the environment department, industries, CSO's, IUCN, WWF, and Sheri. **INGO's** saw research institutes, NGOs, IUCN, WWF, LEAD, and the EC as stakeholders The EC is involved in a scoping study on climate change in Pakistan. And the ADB are active thematically. In academia the stakeholders were defined as those who are impacted by climate change, such as the water, agriculture, and fishing sector, and the Pakistan Metrological Department, SUPARCO, educational institutes, IRSA, and WAPDA, were also considered stakeholders.

Stakeholders have an important role to play in climate change mainstreaming. And a broad based consultative process which includes the perspectives of a diverse range of people is necessary for a wide outreach of the issue. Women, vulnerable communities, and those who bear the impact of climate change are primary stakeholders who must be included in the policy making process.

1.19 What is your institutions role in the implementation of climate change policy?

Respondents in **Provincial** departments clearly said they would partner with the Planning and Development department, and coordinate and play an active role in implementation. But they said the basic steps, and the current rules of business do not contain climate change just now. Thus, there is need for assistance in the form of institutional strengthening and technical support, to frame all policies according to climate change. *"We would have to alter everything, water courses, conservation methods etc."*

Among **civil society**, IUCN said it is the Secretariat to the Technical Advisory Panel of climate change, and a member of the Planning and Development Task Force. Their main role is capacity building, and input into the forum of the UN Conference on Climate Change, and the COP where IUCN has assisted the government for COP 16 and 17 in drafting position papers, provided an analysis, and latest information to GoP. It is supporting the government with technical information, particularly for COP 18 this will be held in Doha later this year. *"We are preparing a concept for effective participation of the delegates in the Advisory Group meeting."* But there is a need to make Pakistan's position stronger at the international level. The Mangroves for the Future Project is a large adaptation programme with a focus on bio diversity and infrastructure development.

The Pakistan Fisherfolk Forum defined their role as an activist and advocacy organization that represent the fishing community, and said that the linkage between disaster and climate change had not been recognized. In terms of climate change the fishermen are the most vulnerable, although they are not responsible for climate change.

Hisaar Foundation focuses on water, food and livelihood issues, and develops research papers. It has developed Water Partnerships at household level and built resilience to food, water, and security which are all related to climate change.

An **INGO**, Oxfam said it is a global player so they are involved in resource mobilization, and at the regional level in Bangladesh there are models for Pakistan to use at the national level. *"We have decided to work at provincial level and work at advocacy for climate change at national level. At the District level we have developed action plans and at the UC level and thesil level"*

we are working on a “bottom up” approach.” Oxfam’s future plans are to work in Punjab and Sindh at provincial level and see how climate change can be integrated into development policies. Oxfam also partners with CSOs for resource mobilization.

FAO works on agriculture, livestock, and food security. Their role would be to look at the Action Plans from the policy and find ways to support and build capacity of government in forestry, livestock, and agriculture.

The UN Women’s Gender Advisor to the PDMA’s role is to respond to a crisis and co-ordinate the crisis, and the NDMA guides the process. UN Women’s role is to sensitize the women’s department in support with CSO’s, but climate change is not on their agenda as yet.

Among the **academic** institutions, the Institute of Environmental Studies at the University of Karachi offers a Business Management degree in environment and energy. There are 12 courses on environment and energy with a focus on the coastal areas, and 12 courses on management. A project on the impact of climate change on the coastal areas of Sindh is being conducted, supported by the HEC of Pakistan and it is a 3 year project which focuses on the entire Sindh coast, from Karachi to Badin, and Keti Bundar and Shah Bunder. Another project by Inter Alert UK is doing a study on conflict related to climate change. And a study on the siltation of reservoirs in Sindh of the Hub Daand environment is also being conducted in collaboration with the University of Australia. It was felt that education institutes are being neglected and should be involved in policy making, since their role was to conduct research, and they suggested that there should be a climate change research center which attracts scientists from Pakistan and neighboring countries and this research should be used to inform policy.

Pakistan Institute for Development Economics is doing research on vulnerability at the district level in all provinces. It is also collecting data on temperature which can be used by the Meteorological offices that need a history of changes to be able to predict weather patterns. So research on historical data and its collection to understand the impact on wheat production is important. They are also developing an Environment Economic course to emphasize the value of the natural resources which are being degraded. Issues like green accounting are also being studied. PIDE’s role would be to support the policy making process with data and information.

There is a wide range of institutions which can provide support to the climate change mainstreaming process. Scientific technical organizations, research institutions, advocacy groups, and gender and environment activists who can offer trainings, forums, and networks to support the mainstreaming process.

SECTION 2: POLICY INSTRUMENTS AND MECHANISMS

This section focuses on policy instruments in terms of which policy documents are used to guide the discussions on climate change, a historical perspective on how environment became a part of the national focus, whether climate change is a priority, linkages between climate change and development policies, a focus on the coastal areas of Sindh in terms of development policies, successful examples to assist in mainstreaming climate change, and possible areas of intervention.

2.0 In your opinion what are the current key policy documents on climate change?

The responses to this question, from the majority of respondents across all the sectors interviewed, were to identify a series of documents related to climate change and environment. For instance the **provincial** government respondents mentioned the Climate Change Policy, the National Sustainable Development Strategy, and research papers by LEAD and SDPI.

Civil society, identified, the National Sustainable Development Strategy and the National Conservation Strategy as still relevant to climate change. Disaster Management, and the contingency Plans made by the Disaster Management Authority was seen as documents which should inform climate change policy. It was suggested that in the last 5 to 10 years water and agriculture have become very important and there should be good concise papers on the impact of climate change in these sectors. Vision 2030, the Mid Term Development Framework, other policies in formulation, was all through relevant to climate change. The main concern was to locate the gaps in the policies and then make plans. The reports of the Climate Change Task Force and research conducted by academic institutions and the Global Impact studies were considered relevant to climate change.

Research was also viewed as an instrument of policy. The State Bank's Economic Report and the Social Audit reports are important documents for policy making, but there is nothing like that for climate change. Similarly, the Metrological department needs universal indicators but there is no consistent data to inform policy, so there is a need to document what people have suffered.

Among the **academia** the Climate Change policies, the Environmental Policy 2005, the Clean Development Mechanism document of Pakistan, the Environment Protection Act 1997, were all mentioned as important documents to inform policy. And the **INGOs** added the Task Force report on Climate Change, and reports of the Ministry of Environment, which submits reports to UNEP for the UNFCCC / CCC as part of the national communication each year is called the national communication NEEDS research, are documents which should inform policy.

The main policy document on climate change is the draft climate change policy itself. Other important documents related to climate change are various strategies, research papers of different institutes, global studies, and reports of the Task Force constituted from time to time which are all essential to support and inform policy.

2.1 How did environmental issues become part of the national agenda?

In the past two decades environmental issues have become part of the national agenda in terms of the focus on environmental issues, policies developed, institutions created at the government level, within civil society, laws and legislation enacted, participation at international forums, and commitments made to international instruments, has increased the awareness and knowledge about environmental issues among the general public. Therefore it was thought appropriate to see if any lessons could be learnt from the mechanisms of this process and apply it to climate change.

In this context, the respondents of the **provincial** government said that in the 1970's in response to the growing issues of pollution, industrial waste, water issues, and its effects on the environment, awareness began on environmental issues and this became a priority.

Civil society, identified the National Conservation Strategy as the standpoint, as this process led to the preparation of environmental laws. The NCS was the main instrument, a comprehensive document with a Vision which was made in consultation with all concerned departments, at national, provincial, and community level. The NCS made suggestions and prescriptions and once the report was launched environmental awareness began on a large scale. As part of an historical perspective, one respondent said that in the 80's and 90's only WWF and IUCN were involved in environmental work there were no new institutions, there was only an Urban Affairs division. The Brundtland Report suggested all countries should develop their own NCS, and the NCS led the rest into the mainstream. It was a bottom up process, and the institutes anchored the process which eventually led to mainstreaming environmental issues. Then this process was taken to the provincial level and consultative strategies were developed which led to the district level strategies. These initiatives gave birth to environment institutes that such as the Environment Protection Agency, at federal and provincial level, and institutes like SDPI, and a number of other initiatives took place. However, another respondent thought that even though the awareness on environmental issues has increased there is still much to be done. The Environment Tribunals do not function properly, the EPA is not effective, and they do not have the powers to take action.

Those within **academia** also identified the Stockholm Conference in 1972 and the Brundtland Report as the first steps towards environmental issues. The NCS, the formation of the Ministry of Environment, the Pakistan Environment Protection Act, the Pakistan Environment Protection Council, the environmental tribunals, awareness which was created and the involvement of the media, the EIAs which are part of building codes, and have been enforced, all these were actions which happened to make environment a national focus.

Concern over the environment became a global issue in 1972 after the Stockholm Conference and the Brundtland Report which focused on natural resources and sustainable development. In Pakistan the National Conservation Strategy through a broad based consultative process, was the main instrument in mainstreaming environmental issues. Experiences of the NCS could provide guidelines for the mainstreaming of climate change as well, since climate change is part of the larger sphere of the environment, and the existing mechanisms, institutions, and legislation could be realigned to include climate change.

2.2 In your opinion is climate change a national priority? If yes, in what way?

With the establishment of the Ministry of Climate Change, the Climate Change policy, and a growing focus on climate change within government and civil society, respondents were asked if in their opinion climate change is a national priority. At the **provincial** level, the view was the focus on climate change is only “a priority on paper” because climate change is not yet recognized as an important issue, among those who are key decision makers. And among the general population there is still no realization, and no awareness, even though there is a Ministry of Climate Change.

Some members of **civil society** thought that the establishment of a Ministry for Climate Change meant that climate change was a priority, and others said it was too early to assess since “*in Pakistan we always react to a situation and are never prepared for it. The key stakeholders are aware of the issues, but not enough is being done, and we are unable to leverage ourselves, we cannot present our case in the context of the geo-political issues, and we have not been able to make our own position known at the international level.*”

It was also mentioned that the economic and political situation of Pakistan influences its priorities as well, for instance Pakistan harvests wheat for Afghanistan, there is climate change migration to the urban centers post floods, and this has increased the load on the cities, there is a war on terror, deforestation, and need to deal with other issues as well, so climate change is not always a priority for the Government. Therefore, research is needed and should be communicated internally and externally and presented internationally. There is an urgent need for relevant adaptation plans to be made quickly, the cities needs to become more resilient. Weather patterns have changed rainfall is erratic, monsoon patterns have changed, so climate change is not the main priority at the moment. In a way marginally it is a focus, but not part of the national consciousness as yet. It is mainly externally driven and not internally, and there is little strong technical input. There has to be complete support for implementation from the government, CSOs, is public / private partnership will be required for implementation to succeed.

Respondents from **academia** agreed with civil society, and also thought that the focus had shifted to realizing the importance of climate change, but food and clothes, are basic needs which have to be met before climate change can be addressed. And they also stated that climate change has to be tackled at the global level, because the carbon footprint is a social responsibility of developed countries and the impact of this is being felt by the less developed countries. The **INGO's** were of the opinion that with national elections next year, finances will be diverted to other issues, and it is the natural disasters which have occurred and their impact which has made the government recognize climate change.

Climate change has yet to be made a national priority, in spite of the new Climate Change Ministry, and the draft Climate Change policy, and a lot needs to be done to bring this issue into the national agenda. The competition between economic and political issues and environmental issues means climate change does not get priority, and so it will be necessary to develop a clear position both internally and externally on this issue so that its importance can be recognized at the national level.

2.3 How are climate change initiatives affected by the current pro-growth development policies?

Only one respondent answered this question, an environmentalist from civil society who said that economic policies miss the social aspect, the people are ignored. Other countries in the region have defined "green economies" and if Pakistan decided to define a growth agenda and provided tax breaks there would be no need for conflict.

Unless the social aspect is included in pro-growth policies, the long term coast to development will continue.

2.4 Can you identify the key national policy documents which are essential to mainstream climate change at the provincial level?

In order to understand the entry points or spaces available to mainstream climate change, respondents from **civil society**, **academia**, and the **provincial** government said all policy documents should be reviewed, and adapted to each province and their situation through provincial consultations. In particular, agricultural and industrial policy should be in line with each other, and Pakistan needs to follow a policy between economic development and environment conservation.

All national policy documents should be reviewed and adapted to each province through provincial and district consultations.

2.5 In your opinion how do the current national development policies view the coastal areas of Pakistan?

This study also has a special focus on Sindh and the coastal areas in particular. In the context of climate change it was important to explore views of key respondents to see how the current national development policies view the coastal areas.

The **provincial** level respondents stated that in Sindh there is a huge problem with sea intrusion and the sea level is rising. There are not enough resources to make dykes so we have to look for natural defense like the mangrove forests which has proved to be effective. So we need to revive the mangroves and plant more protective forests. **Civil society**, said the mangroves are also a breeding ground for prawn and shrimp, and are also carbon storages. But they added that in the national plans and provincial plans the coastal areas are not a priority area, not a core area. In the coastal areas there is rapid urbanization, sea level rise, and the challenge is the 1,000 km of coast line is not well studied. Most of the area is not explored, e.g. coastal and marine protection areas, and the climate change policy has conveyed the importance of the coast but not as a priority. Similarly, the fisheries policy does not focus on the fishermen or their communities, the focus is on export of aqua culture. From a gender perspective, it was thought that there is a marginal focus on agriculture, and floods control by dams, in certain policies, but coastal issues should be integrated into themes like food security and water. According to the **academics** there is no mention of coastal areas in development policies, it is still neglected. The sea level rise is a critical issue, some say it is a natural phenomenon which happens every few 100 years but with the glacial melt as well, the water will rise and this is a global phenomenon. So there is the need to explore alternate sources of livelihood for the communities who will face environment migration when the coast is affected, and more research is required to define ground realities. And development policies must begin to recognize the linkages between climate change, and the coastal belt.

The coastal areas of Sindh have already begun experiencing the impact of climate change. It is thought that the rise in sea level and sea intrusion is a result of climate change, which has made the coastal communities vulnerable and insecure to natural hazards such as cyclones, tsunami's and changing weather patterns. The mangroves which grow along the Sindh coast have been degraded and continue to be threatened by cutting, and the lack of fresh water to the delta, and their forest cover has decreased. National and provincial plans do focus on the coastal areas, but not as a core area, and the fishing communities are neglected. Thus, development policies must recognize the linkages between climate change and the coastal belt.

2.6 In your view can you share any examples of successful processes, practices or policy instruments used in the past; pre 18 Amendment which are still likely to be useful in mainstreaming environmental issues in 2012-2013?

In continuation of exploring past practices which could provide a direction to mainstream climate change, respondents were asked to share successful examples from their experience. Those at the **Federal** level said, *“a consultative process is essential for ownership, and if this is participatory then mainstreaming comes with this process.”*

At the **provincial** level a few micro experiences of the Forest department were mentioned. It was felt that generally the blame is shifted to the politicians but if we give the community and people a chance to play their role change can happen. It was suggested that the forest department's role should change from hands on management to regulation and promotion and be removed from the day to day management which should be given to the people. The interaction of the Irrigation Department and the community has always been very close and they have fought the impact of floods together. Several successful stories exist at local level in the planning process, for instance the District Integrated Vision should be integrated with climate change, and this process provides the mechanisms to do so.

Within **civil society**, the provincial and district Strategies which emerged from the NCS, were mentioned and mainstreaming of climate change should follow the same process. The institutes exist in Baluchistan, NWFP, in the provincial secretariat in the Planning and Development departments, and these are all workable mechanisms. One particular example was given of the Agriculture department in Hyderabad where a radio program for farmers has been initiated. A person called Mustafa Nawraj provides the farmer with relevant information regarding crops the weather etc. at the community level providing information in local languages to the farmer. This is being done within the agriculture department so it could be multiplied as a model in other areas. And the NDMA programme on advocacy especially with parliamentarians is another good example because this is the only way to bring climate change into the political process.

The respondents from **academia** mentioned the most successful example is of the government introducing CNG. Pakistan is one of the very few countries who have implemented CNG and reduced the emissions, the price is low and there are also plans of importing Liquid Natural Gas (LNG) which is close to CNG.

Experiences of the past and projects with successful outcomes can be used as models to mainstream climate change. Basically the local communities must be involved in the planning and implementation of any project for it to be effective and successful. New initiatives should be encouraged, and existing systems must be used to reach the micro level, and pressure groups can be formed to raise the voices of the people into the policy planning and mainstreaming process.

2.7 Are there any potential areas of intervention to mainstream climate change from policy into action?

In response to this, the **provincial** government identified riverine areas, the coasts, food security, livelihoods, water and DRR. **Civil society**, said water conservation, rainwater harvesting, disaster risk reduction, are areas for intervention. In Baluchistan on the coast there is work being done on early warning systems, and how to respond to a disaster. In Thar the issue of desertification is important, because it will destroy agriculture lands, this is a vulnerable area. In the north mountain glacier melt has led to floods and increased the communities' vulnerability. We need to see how the policy addresses these issues, and we need champions among parliament and in the private sector to advocate for climate change. Areas of intervention and entry point exists all over the place, the forests absorb the emissions, so forests are an important entry point, we should focus on forests which are a vulnerable resource because it absorbs CO₂, the banks of the Indus flood each year because there is no forest to protect the banks. The wetlands also absorb CO₂; there should be control of pollution and waste water which goes directly into the water bodies.

Other areas of intervention are infrastructure and changes in the way coastal houses are built. First they were made of timber now they are constructed of RCC. After the floods the people have learnt and raised their thatched houses to avoid the water, but they need guidance. There are many simple solutions and awareness is being done through NGOs, the people are now aware of the floods coming this year. They have already understood the changing and unpredictability of weather patterns, but we are confused between scientific and indigenous knowledge. There are entry points beyond awareness, but how to address the issues and what are the remedial steps, these must be addressed. In South Punjab, people are aware of climate change but they have no technical knowledge so they cannot make a change in their lives. In Ketri Bunder and Khari Chan the women knew the winter would be longer this year based on their local experience. So the current remedial methods which are being developed by the people based on their experience and grassroots life are areas of intervention. We must build on these.

The CSOs also said we have to intervene at the household level, then the district level, and look at the natural geographical limits. The coast, Indus plain, Himalayas and more work is needed on the glaciers. The areas of intervention are planting ice bergs, and to work with nature, we have to “think outside the box”, and the administrative units must work with scientists on the ground.

Entry points for intervention should be identified according to the geographic area of a place and existing policy must be reviewed to see how it addresses this issue, and then advocacy should be planned in coordination with relevant stakeholders to take the sector’s issues forward. Tangible interventions should also be considered such as changes to infrastructure. Simple local solutions should be sought to guide the people to make realistic adjustments to their lifestyle. And a clear understanding of scientific and indigenous knowledge is needed together with technical information to support any intervention at the household or district level.

SECTION 3: MAINSTREAMING OF CLIMATE ADAPTATION INTO POLICY MAKING AND PLANNING

This section focuses on the issue of mainstreaming of climate adaptation into policy making and planning. The causes of climate change, adjustments at local level in response to climate change, government focus on adaptation, plans at Union Council level, mechanisms for implementation, and feedback processes.

3.0 What are the main causes of climate change in Pakistan?

All respondents stated that Pakistan is not a contributor to climate change, but we share the impact of this phenomenon. The respondents from government at both **federal** and **provincial** level, **civil society**, the **INGOs**, and **academia**, defined the causes of climate change as, over population, industrial pollution, a lack of regulations, vehicle pollution, and urbanization. They said that the water cycles have been disturbed, sea intrusion has affected Badin and Thatta, there has been an increase in temperature which has led to the melting of snow and ice, and flooding and higher intensities of cyclones are all factors of climate change. And although Pakistan is not a major polluter of carbon emissions, and the emissions are low that does not mean we do not work towards lowering emissions. So despite the fact that we do not contribute

to carbon emissions we do feel the impact of climate change. It was suggested that there are plenty of opportunities on adaptation which can be explored, such as vehicle emissions, and CSR for Pakistani companies, who burn anything anywhere since there are no controls and this contributes to the environment to the city and to acid rain. Also it was considered important for Pakistan to be part of the global debate because it is bearing the brunt of the effects of climate change. Thus, preventative actions to mitigate the effects and build resilience are required, to have consultations on climate change on the ground to work on resilience, and see what can be done. This is a big issue, and the floods will happen every year so what resilience can be developed. What measures can be taken at ground level? Do we learn to grow food? Learn that these events are happening so we have to change our lifestyle? We are not doing so, and local solutions for resilience have to be found. Pakistan is organized in districts and the emergency excavation plans need to change the pattern of settlements. There is an urgent need to be prepared.

Although Pakistan's contribution to global green house gases emission is negligible, it still bears the impact of climate change. And industrial pollution, vehicle pollution, and lack of regulations will add to the increase in emissions, so we must prepare to reduce these in the long term, and work towards lowering these emissions. Therefore it is important to be a part of the global debate on climate change, to build resilience at the local level, and to develop strategies towards adaptation and mitigation.

3.1 In your opinion have any adjustments (social or ecological) been made/ put into place to respond to the challenge of climate change at; provincial /district level?

Responses to this question were mainly from civil society, as the provincial government's view was that since the climate change policy has not been made public yet, and it is not in their current plans, no adjustments have been made. Respondents from civil society emphasized their view that there is a need for a greater understanding of climate change, before any action can take place. And added that there are no visible projects on climate change at the moment, *"because the government does not know about climate change so what can they do?"* also there is an unfortunate attitude which prevails which allows the environment to be destroyed so that more funds can be received in the guise of development. The communities, and the farmers are confused, and new cropping patterns have to be formed, so universities, NGOs, and research institutes must be involved because at the moment the projects are still on a small scale.

However, respondents from civil society were aware of some initiatives which had been taken such as the forest department who have held a few seminars to explore this issue, and to mobilize resources, but there is no infrastructure, and no coordinated efforts. The Mangroves for the Future programme (MFF) was mentioned which has been developed in response to adaptation and resilience for the coastal belt. It was also mentioned that in Badin the line agencies are aware of climate change, and the instruments used are the community climate change action plan which involves the UC and thesil level, and there is also the District Plan and the Annual Development Plan as a reference for this mechanism. Similarly, it was thought that farmers may be adapting on their own in response to the changing harvest season. Therefore, for any adjustments to be made in response to climate change, the knowledge gaps at every level have to be addressed. It is extremely important to know scientifically this is really happening and how different areas are affected differently. **The challenge is global but adjustments are local**, and with the uncertainties there are no predictions for floods or

droughts, the patterns have changed so how do we respond? Thus, we have to develop a knowledge base to understand the impact of climate change, before adjustments can be made.

For any social or ecological adjustments to be made the climate change policy has to be made public and disseminated. Then the Action plans can be viewed and social and ecological adjustments can be formulated. This requires a greater understanding of the issues, and whatever initiatives do exist on a small scale their scope should be increased. The knowledge base has to be deepened because although the challenge is global the responses and adjustments are at the local level.

3.2 Where and in which sector is this taking place? (give examples)

The coastal areas were the only sector mentioned, and it was thought that planning to protect the coastal communities should begin these are vulnerable communities, and since there are no resources to build a sea wall we must identify natural barriers of protection.

The coastal sector appears to be the only place where adaptation measures are taking place.

3.3 How do other line departments view climate change policy/ initiatives?

(The responses to this question are linked to the fact that at the time of conducting interviews the climate change policy had not been made public, hence this question was irrelevant.)

3.4 Who determines priorities for resource allocation at the coastal level?

The respondents said government determined priorities for resource allocation, and other stakeholders and donors also had an influence, but government has its own priorities like addressing food and basic needs first.

Priorities regarding resource allocations are determined by the government according to its current priorities, so the competition between economic needs and social development remains an issue.

3.5 In your opinion is the focus of government on adaptation or mitigation? Why?

All respondents both government and civil society, had the same view that greater focus was on adaptation to climate change. At the **Federal** level, the reasons cited were because there are many natural changes which are happening and we cannot arrest them, such as glacial outbursts, and sea level rise, so we must prepare adaptation plans taking into consideration the geographical diversity of the region. Another example was in the agricultural sector where if the temperature increases then we must use seeds which can adapt to these changing temperatures. According to the federal respondents, *“there are many strategies we can adopt for adaptation, the communities are affected by floods and are very vulnerable, so houses should be built on high areas which are less prone to floods, and areas away from the embankment. But before that we have to determine the threshold of the threat and relocate the people. Alternatives such as building on poles can also be considered in flood prone areas, to*

raise the foundation of buildings in the flood prone areas but these have to be put into the building plans from the start.” However the government is also looking at mitigation in the context of carbon emissions, a response to overcome those challenges related to reducing green house gases. The **federal** respondents suggested to build and to design industrial systems with changes so that fewer emissions are produced. They pointed to an opportunity in the Clean Development Mechanism (CDM) which means that whatever you are able to offset in CO2 emissions are traded in the share market. CDM is only available in the developed world so this is an incentive for LDC's. So Pakistan must also become a part of the international debate. In this context the Ministry of Climate Change would like to see all organizations and agencies collaborate with the Ministry, whose role is to facilitate and enable the institutions to come forward and form partnerships, and the Ministry would guide them towards adaptation and mitigation measures.

The main focus of the government is on adaptation, because the effects being felt as a result of climate change are those which require adaptation responses. Sea level rise, glacial melt, and changing weather patterns are the impact of climate change and so adaptation plans and strategies need to be developed and put into place quickly to build resilience and be prepared for these future.

3.6 Are you aware of any plans at the Union Council level which would prepare the communities to respond to the local effects of climate change?

This question was directed to those who were working at the provincial level. Among the respondents at the **provincial** government level, they said plans were being made to develop District Environment Committees within the government of Sindh in the next 3 months, to assist the environment protection agencies in their mandate. The need to have a study to determine the impact of climate change on all the geographical sectors in Sindh was also identified, because if climate change has a positive impact then it should be built on further, and if there is a negative impact it should be addressed. Another example of the coastal areas was also mentioned in the context of the effects of climate change and local responses. It was said that fifty years ago 80% of riverine areas were forested and one could throw seeds and trees grew naturally the soil was so fertile. Mitigation measures should be taken in agro forestry in high lying areas where the canals are losing water and should be lined, but no changes in terms of infrastructure have been made to deal with climate change.

The Integrated District Development Vision for Badin developed by IUCN was also mentioned as it had a focus at the District level which is being implemented. In this context the local government system of the previous years, had a mechanism within it which was a way of expressing the voices of the poor. And since climate change policy deals with behavior change it must be owned by the people. Climate change is a change in environmental behavior and we have to convince people to change. Therefore in order to prepare the communities to respond to the effects of climate change first the current policy should be reviewed for all sectors, through a consultative process and then develop projects at each province. At present there are very few direct projects on climate change but it affects the day to day business because of cropping patterns. These have been affected and in places cultivation has moved from rice to cotton in the coastal belt all this is related to climate change. New seeds and technology is needed within the next 4 to 5 years in Sindh. And because of temperature variation and introduction of BT cotton there has been a shift to cotton production in lower Sindh. Rice can tolerate all climates but cotton cannot tolerate changes in climate. Hence, the farmer must be prepared to respond to these changing conditions. Respondents were aware of some training at district level being

conducted by CSOs and that the UN group of agencies was also conducting trainings through its partners at UC level.

A few initiatives are being taken at the Union Council level in Sindh, but in general the impact of climate change has not been understood by the communities themselves, so although they may be responding to the changes on their own, they are unaware of how to respond or adapt in a strategic or consolidated way.

3.7 What mechanisms should be in place at this level to implement the plans?

According to the **federal** level respondents after approval of the Climate Change policy there is a plan to have Roundtables in a multi stakeholder forum, where the policy will be examined to see where the strength lies of the organizations who will implement this policy. The Ministry can help to achieve this with appropriate interventions. At the **provincial** level, the main response from the government was that first climate change has to be made a priority and then *“we have to understand the issue, since at the moment this is a “non issue”, and the focus is on basic needs, so the policy makers they have to recognize the importance of climate change.”* One civil society respondent said that pre 18 Amendment there was a channel and mechanism of communication, but now it is disrupted, since the local government system has changed. They added that there should be people hired specifically for this purpose, and other disaster humanitarian organizations like UNOCHO and UNDP should be involved to support implementation and the infrastructure at the local level which is in existence should be used to get access to the grassroots.

Plans to hold Roundtables through a multi stakeholder forum are being made at the federal level to take the policy towards implementation, by assessing the strength of the organizations who will be involved in this process. Once climate change is recognized as a priority, then with the support of the Ministry institutional mechanisms can be put into place at the Union Council level for implementation.

3.8 What feedback mechanisms exist at the UC/ district level for participation into the policy making process?

The prevailing view of the **provincial** government’s respondents was that most people at the district level do not have the capacity to deal with these documents and give feedback to the provincial departments so no one gives any feedback. That means the provincial departments do not get information from the communities, and the districts are also disconnected with each other. The only example mentioned was the Integrated District Development Visions which are seen as a participatory process in which government officials are also involved. Other respondents were not aware of any feedback mechanisms.

Hardly any feedback mechanism exist at the Union Council and District level for the people to participate in the policy making process. This must be addressed both in terms of capacity building of the individuals who work at that level to be able to know how to give feedback, and there have to be mechanisms in place to take this feedback to the appropriate forum.

3.9 When planning or review meetings take place how are decisions implemented?

Here, the main response was that implementation is a major issue, and there was no specific process mentioned in terms of decisions carried forward.

3.10 To what extent is policy planning a participatory process? Please explain

(This issue has been covered in Section 1, so it can be merged with earlier responses.)

In general it was thought that the policy making process is not participatory. Usually a number of institutions are invited for discussions but their feedback and comments are not reflected in the report. One respondent stated “*these are all donor driven agendas there is no political will to implement the results, and to a large extent it is token participation, not participatory in the true sense.*” Hence “shadow” reports made by civil society provide an alternative view of the issues. One respondent commented that that had been taught by civil society that it is essential to include the community, but the dilemma is “*people need a hospital, but we want to give them drainage, so how do we manage these different priorities?*”

3.11 Who are the decisions from policy planning meetings shared with?

3.12 Can you describe a typical cycle of policy making at national level to action at the local level?

Both issues of question 3.11 and 3.12 have been covered in section 1.

SECTION 4: RECOMMENDATIONS OF KEY INSTITUTIONS AND FOLLOW UP ACTIONS FOR 2012-2013

This section focuses on the challenges and suggestions made by the respondents regarding mainstreaming of Climate change.

4.0 What are the gaps in the current climate change policy planning process?

The respondents from **academia** identified the gaps or challenges in the planning process as the lack of capacity building of individuals and institutions at the provincial level. They also said there has been no real change so far, and the real challenge is implementation. They mentioned that Pakistan is facing a shortage of fresh water since we are governed by the monsoon system which has been disrupted by climate change. It has become more intense with evidence of more rain in the north and less in south, and so the intensity of dry spells is greater than wet spells and the weather patterns are changing. Some Ministry of Environment issues can be dealt with at the local level, but issues critical to the global and international level have to be kept at the Federal level; other issues can be given to the Provinces.

4.4 In your opinion what are the main priorities of policy makers regarding environmental issues?

Respondents from **provincial** government said that the Environment policy is still considered a federal subject. The Pakistan Environment Protection Act is a federal law, and for every Act

there are guidelines prepared for implementation. For instance there are various guidelines for NEQS which were prepared at federal level, and given to the provinces for implementation. The Provinces then implement the Act through references to the Act. There is a little awareness in the Forestry Department about climate change issues, except for those who have been to workshops or trainings are aware of climate change.

4.5 What are the government's main priorities regarding climate change?

One respondent from the Disaster Management sector had the view that the issue is that in Pakistan we are used to emergency and response, and we do not take the process to completion. Climate Change and floods are all causes of disasters, but the linkage is not recognized therefore climate change is missing in policy. Those of us working in Disaster and Risk management we recognize this link between disaster and climate change, but it is not recognized by policy makers. Climate change adaptation is most important and we forget about what the disasters can be like, take the drought in Baluchistan, rangeland is overgrazed, which has had major repercussions on livelihood and food security but this does not attract attention like an earthquake. Hence, climate change needs to be mainstreamed in all the plans as it is a cross cutting theme. We have to make an assessment of the existing situation we are a data deficient country and then assess and the prepare plans that are environmentally conscious. The needs of the people and the eco systems must be included as well. The policy needs to be taken down to the provinces for finalization, then dissemination, and finally implementation. And we have to have concrete plans to make the work policy. Climate change related policy also needs to be user friendly for the people to understand. Now that we have a Ministry for Climate Change we hope it will happen soon.

4.6 In your opinion when will the draft Climate Change Policy be approved? If yes, when?

No specific timeframe was given by any respondent about the notification of the Climate Change policy.

4.7 In your opinion what steps are necessary to mainstream Climate Change at the National level?

According to respondents at the **Federal** level, institutional capacity building for strengthening implementation is needed. Human resources financial resources, experts on different sectors and those with a focus in a particular sector are necessary to provide technical advice. Participation in international debates is essential. There are climate change funds available for awareness building, and projects on climate change. Access to these resources depends on how actively we participate in the negotiations. There is a concept of "green" economy we have to make our presence felt on different committees a powerful representation is needed and Pakistan has to make a niche for itself at the international level. It is predicted that in 2035 there will be 200 million climate change migrants that is the level of vulnerability which is expected. The World Bank report 2010 shows the damages the floods have done to our infrastructure. On a German Watch Vulnerability index Pakistan is on top, and the floods are recurring phenomena. So we have to change the mindset of the people leading the development process in the country. Climate change has to be integrated into the development process and taken very seriously. All stakeholders must be involved at all levels, in projects, plans and all processes because the impact is on different sectors. We should not lose site of the grassroots

and youth, the household level, the education sector, and we have to focus on the next generation of young children to make them aware of these issues.

The institutions cannot handle all this alone; there are opportunities which we have to use such as the Global Environment Facility, and WWF who can assist us. Public sector projects, such as dams, irrigation canals are linked to climate change. We have to change the focus now where we make climate change an integral part of the infrastructure of all projects and schemes. We have to revisit and integrate the existing policies and plans, in our cities. The drainage system has collapsed because the velocity of the water has increased due to the increase in the flow of water, so the carrying capacity of the old system has reached the limit. These are difficult challenges the old ways are not used anymore, now we have “blind” development, we should use the natural contours of the land to direct the drainage as they do in other countries, but here we obstruct the natural flows and drainage systems. We have to be sensitive and we have not yet learnt to solve the problems or examine local situations.

Respondents of the **Provincial** government stated that there is no consciousness of climate change as a concept it has not been imbibed yet, and the understanding of the impact of climate change is very superficial at the moment. A focal department is needed with representation from all other departments, an umbrella body to focus on climate change issues. At present there is no awareness of climate change issues, among government departments and individuals. Post 18 Amendment there has been no change at provincial level. Focal department are needed as an umbrella to mainstream climate change with representation from other departments Provincial climate change policies are needed as well for implementation at provincial level.

Actions taken at individual level affect and impact climate change, the main entry points are the media which can be used to extend the message and radio can be an effective medium. We have to have localized action, small initiatives which a farmer can use. Changes in cultivation and moving to multi cropping may have to be considered to reduce the risks at the individual level. At the individual level conservation of water and electricity is also possible, and these changes can be made as well. There should be collaboration, doing things on the ground to learn and inform the policy making process. We must work jointly with CSO's and also have to be positive, and have candid discussions on the weaknesses of the system, and work at the ground level to improve the situation. Then move to the national and international level. We should have realistic plans and good implementation mechanisms, our efforts always go into plans and not enough into implementation.

Civil Society added that regarding the National Climate Change policy, the next step is the Strategy, which has to be made in consultation with civil society in order to have ownership. The strategy has to be result oriented, and best practices from neighboring countries such as shelter belts in the Bangladesh created to protect the coast should be studied as our coast is vulnerable to natural disasters. Regarding mainstreaming climate change the government is aware of the issues, we need the Executives of this country to be aware, the Prime Minister / President the directions need to come from them, and they should take control of the process. There is a process in place to mainstream climate change. The Planning and Development Department, and the Ministry at the Federal level exist; the question is how does it cascade down to the Provinces? That is the main challenge. There is a need to get everyone on one page because everyone is doing their own thing at different levels. We need to have one forum. The new Climate Change Ministry should lead the mainstreaming process. Acceptance of the policy by relevant stakeholders is required, and the Ministries have to understand their individual responsibilities. The institution responsible for implementation needs strengthening, human

resources are required, and by changing the name of the Ministry change will not happen automatically.

The Global Change Impact Study Center for research has many scientists, but it is difficult to keep them due to the lack of resources. Finance of climate change is also needed, and when policies are formulated a fund should be established at national level to provide support. Climate change needs to be properly studied documented and communicated. Pakistan experiences extreme events and has had changes in biodiversity the media is not aware of the issues. Local level research is needed. The project documents that are prepared for development projects especially for infrastructure should be climate change conscious, or we will spend millions by ignoring climate change costs in the long run. The Adaptation plans need to be ecosystem based, if we construct a road this can bring erosion so we have to construct in a ecosystem based adaptation way. In the coast we need biological barriers as opposed to physical barriers. Rapid urbanization is a challenge faced by Pakistan, there is unplanned and rapid urbanization and many issues related to this. At the Federal administrative or provincial administrative level there has to be a participatory process, with civil society because NGO's are more active. We have to work on water and food issues from household level to the Parliament.

We need to consolidate a position on Pakistan which should be communicated externally to donor organizations for CSO's to move more effectively. There is a lack of awareness and we are not presenting Pakistan's case internationally. The Ministry of Climate Change and CSOs can be involved in this process too, the COP is the main forum, internal communication is weak on climate change, should we should include the corporate sector that must be encouraged to ensure Corporate Social Responsibility. There are opportunities which we need to be aware of. Solid waste, water management, and REDD needs more technical research. And we must make the nation aware, government has to address the issue quickly, environment gets lost in the argument. More coordination is required between NDMA, PDMA, DMA there is no cohesion, no early warning systems, no modeling of DRR models. There is still much to be done, and we need a forum for partnership in an organized manner. We have a number of policies and plans and must focus on implementation. Policies are formulated without taking into ground realities; we find gaps and need more participation from local level. The resources are available; we have to use them properly. The CSO's and political parties must politicize the issues of climate change. We are not the contributors to climate change but we have become more vulnerable so climate justice debt campaigns are needed. External debt is mounting and we should call for debt cancellation, but the government has to ask for this. Climate change adaption measurers should not be made into an excuse because sea intrusion has already occurred, so we are told to accept it, and adapt to the change, so we accept the change, but why did this happen in the first place, this is the real question.

Those in **academia** stated that we should identify where the impact of climate change will fall. Is it a major threat or opportunity, e.g. the increase in temperature most plants would be happy to thrive in these conditions, but this also means the use of nutrients from the soil will be faster, and this will lead to desertification. So we need research based on scientific knowledge and must share this. Pakistan should also actively participate in global initiatives, in the true spirit, i.e. it should acquire the knowledge and information and have the people who have the capacity to absorb this information. The climate change policy needs to be implemented as soon as possible, as a priority. The time is short and we must take action now, climate change will not wait for us. The quality and quantity of water has to be improved, and we need to focus on water management. Agriculture system and water allocations to agriculture need to be ensured. The lower riparian's must get their due share of water which should be available throughout the year. This will protect the eco system of the Indus Delta. Raising awareness is the most important to

provide the basis for future work there is no large scale data we only have it on a small scale therefore it not representative and cannot be used on a broad scale. PIDE has a 2 year MPhil program for men and women with about 20 researchers in it. They are working on different issues, post earthquake in terms of deforestation, water pollution the Cholistan desert and how drought affects the life of people, the impact of mini dams, air pollution, food insecurity, solid waste management, vulnerability at district level, and so all this data can be used to inform policy.

The **INGOs**, thought within research there are institutional gaps as well, between research to action and to the local level, we need technical data on crops and seeds. The NDMA and Climate Change Ministry should coordinate and collaborate with each other and develop strategies and plans. Donor perspectives are also important and there is no clear cut policy from the EC or DFID on strategy for Pakistan. WWF's role can influence and being local experiences into the donors strategy. How does one make the government interested in our projects to scale up the work we are doing? And how does one increase the scale of the local work and influence the government when there are so many challenges at district level, when the local government system has been disrupted on the ground.

4.9 How do you see the Climate Change policy being implemented at the District level?

(From discussions with the respondents it was apparent from what they said that, unless the climate change policy was shared with them, and Action Plans had been made, it was not possible to define steps to implement the policy at District level. And since no effective mechanism existed there were no conclusive views on this issue.)

However, according to the **INGOs** there is no mechanism at the moment to take the policy to the District level. **Civil society** thought that the only way to implement policy at the District level was to form advocacy groups, to build pressure from the ground upwards to the policy makers.

4.11 In your opinion what steps are necessary to mainstream Climate Change at the District level?

The main challenge is the lack of knowledge and basic understanding about climate change. There is no common understanding of the issue, and someone has to take the lead role in the process. Also there is no system of accountability. So first this has to be put into place before the issue can be taken to the District level. One respondent from the Disaster Management sector thought, that the PDMA has no link with the districts; the process has not been completed. In 2007 the NDMA was formed, and in 2010 when the floods occurred 3 provinces were affected, we had the time and opportunity but we lost it because of vested interest. There is some provincial autonomy the PDMA in Hyderabad, the DDMA in Thatta and Badin which were established in 2008, and this should have increased the role of the provincial and districts but this did not happen. Disasters do not inform you beforehand. The Meteorological dept. had 4 days warnings and they did not inform the people effectively. We should measure the cost of the disaster v/s the cost of the system.

Mangroves are a natural shelter but the coastal institutions are afraid to give the warnings because where will they shift the people? What is the contingency plan, if they were to inform the coastal communities of an impending disaster? Oxfam is also doing research on this in terms of DRR and the Post 18 Amendment. At the DMA level there are provincial officers what

is their role? There is no coordination. Within the PDMA there are large gaps and we must have an autonomous body on disaster management. There is no understanding or linkages between PDMA and NDMA, and no linkage to climate change, they only focus only disaster. We react after a disaster has happened so climate change should have a separate independent climate change and disaster management unit to work at the grassroots. Pakistan's climate change program will be mobilized through continuous interaction with stakeholders and with the Ministry of Climate Change and the Planning Commission to mainstream climate change through strategic environment assessment. Area based initiatives at urban level is an option to see how climate change has impacted at different levels, and also with provincial governments.

4.1 Where and at what level do these exist?

(All respondents mentioned gaps at various levels and this has been covered in the other sections)

4.2 What should be done to address these challenges?

(Included in Mainstreaming issue)

4.3 What are your suggestions to improve these processes?

(Included in Mainstreaming issues)

4.10 What are the main instruments of the Climate Change policy which will be implemented at the District level?

(This question again relates to the Climate Change policy, and was too hypothetical at this stage, so no specific responses received.)

Conclusion

Section 1: Policy making, planning and implementing organizations

There is no doubt that there is a policy planning process which exists between the provinces and the federal level, and that the provinces are able to include their views in this process. The issue is that the senior level decision makers are not always included in discussions, so their experience and knowledge is left out of policy formulation and they should always be included in policy related meetings, so their views can inform the policy making process. It is also essential that policy related discussions are inclusive of all stakeholders, particularly the local communities, whose views should be reflected in the final documents. Effective implementation of policy will only take place if there is a sense of "ownership" among those who will implement the policy itself. Policies must lead to Action Plans and be translated into projects, with clear strategies for implementation at provincial and district level. Thus, effective policy making requires a mutual consultative process between government and civil society, through a series of discussions to develop a consensus among all relevant stakeholders, so that implementation can be ensured.

The establishment of the Ministry of Climate Change signifies the government's priority towards this issue. However, the first step toward mainstreaming Climate Change is for the Climate Change policy to be made public, and disseminated as widely as possible to all stakeholders. Then Action Plans should be developed in consultation with the provinces, which must make

their own interventions for implementation. The Ministry of Climate Change should lead the process and support the provinces in implementation. Individual provincial climate change policies are needed because of the geographic diversity of each province which will require a specific focus on the coast, dry lands, mountains, and riverine areas and the local communities living in these areas.

Changing the name of a Ministry does not necessarily mean a change in priority, or a shift in authority, which remains at the “top” and does not reach the provinces. A common understanding of what climate change really means, scientific data to measure its impact, resource allocation, greater awareness, and clarity about the concepts of adaptation and mitigation are necessary to pave the way towards mainstreaming climate change. And training, capacity building and technical expertise has to be developed at the provincial level, so that the provincial officers can develop a knowledge base related to climate change. So although climate change has been recognized as an important issue, not enough is being done, and not fast enough to prepare for its impact.

The political process and elected representatives are also responsible for and included in policy making. Hence, they should reflect the needs and views of their constituency. Political will and commitment, accountability, and transparency are all essential elements of an effective policy planning process. And integration of climate change as a crosscutting issue is necessary across all departments, since its effects are felt in the social, economic, and financial sectors. The main challenge to the policy planning process is implementation. The lack of implementation is the main issue which leads to the failure of legislation, plans, strategies, and policy, so failure to implement action plans makes the policy irrelevant.

The 18th Amendment

Policies prepared in the past, and especially before the establishment of the Ministry of Climate Change and the draft Climate Change policy does not address climate change. Therefore there is a need to realign previous policies with climate change, and to integrate climate change into new ones.

Policy making takes place at the Federal level, and after the 18th Amendment the provincial governments have the authority to develop individual policies and plans. However, duplication within policy and of policies should be avoided. Since the 18 Amendment allocation of financial resources to the provinces is supposed to have increased, so support for climate change should be included in new allocations. However, generally the utilization of resources has been low, and the choice between infrastructure and intangible projects will have to be made. The process of budget disbursement is an established system, and follows a routine procedure, although political influence does lead to the misuse of funds. Investment in changing attitudes which is behavior change and required for adaptation practices will have to take greater priority if climate change is to be addressed.

The 18 Amendment has presented many challenges to the provinces, mainly in terms of implementing the requirements of the process. The lack of capacity at both the federal and provincial level to manage the changes this process has raised to effectively devolve the subjects to the provinces has led to confusion in the provinces to manage this increased work load with limited staff and resources. The continuity of a programme or a project has been disrupted since they were conceived at the federal level and now have to be completed by the provinces, without clear guidelines or briefs to work with. In this scenario climate change is a

new concept and needs a clear understanding of how it will be integrated into the work of the line departments, and across the sectors. It is too early to assess if changes have been made to adjust to the outcomes of the 18th Amendment at the provincial level, since there still appears to be no clear strategy on how to take the process forwards, and climate change is still perceived as a federal subject.

Gender and Climate Change

Gender is a crosscutting issue, which invariably gets neglected in the policy making process. Women's interaction with the natural resources and as managers of natural resources at household level is often ignored, and as a result women bear the brunt of natural disasters and in this situation the impact of climate change. The nexus between women and climate change has to be understood, women's role in climate change has to be defined in the local context, and factual evidence of these linkages must be collected so that gender can be included in climate change mainstreaming. The lack of implementation of existing policy related to gender is again an issue which prevents progress, which when compounded with cultural barriers relegates gender issues to the fringes in a policy. Hence, awareness, trainings, research, and gender sensitization is required to mainstream women within climate change. So to mainstream gender in the context of climate change would be to make women and environment a central theme in all policies, budgets, and projects.

Climate Change Mainstreaming

“Mainstreaming is a process rather than a goal that consists in bringing what can be seen as marginal into the core business and main decision making process of an organization.” (UNESCO 2003) Therefore, the impact of climate change, clarity of what adaptation and mitigation means in local situations, the ground realities of a diverse geographic country, the dearth of technical knowledge, research, and information, are among the main challenges for mainstreaming climate change. Other factors such as basic needs, poverty, security issues, and social and economic aspects compete as a priority to climate change. In addition, there is an urgent need to review past policies and realign them to include climate change, and to support this with appropriate resource allocations. Implementation has been weak in the past and unless this is ensured climate change will not be mainstreamed effectively in policies and at the level where the impact is felt the most, which is among local communities. Mainstreaming will also require a consultative and participatory process with the inclusion of all stakeholders, and a genuine incorporation of their perspectives into action plans. And finally, adaptation practices must be tailored to different situations based on geography, weather patterns, crops, and the communities living in these areas.

To mainstream climate change across other policies needs an individual to lead the integration process, it would require a consultative approach with the provinces and stakeholders, and climate change should be seen as a cross cutting issue. Implementation at macro level is easier than at micro level, because at the local level there is a need to develop a greater understanding of climate change

Coordination mechanisms need to be strengthened, and since climate change is a cross cutting issue and would require the inclusion of various departments, a mechanism where all relevant departments can communicate with each other both horizontally and vertically should be established. Government departments tend to work in isolation, and there is a low level of information sharing between and across departments. Interdepartmental conflict, and

personality clashes which adds to the isolation, and so coordination should be institutionalized and not left to individuals.

Similarly, adaptation plans cannot be made in a vacuum, so the emphasis is on understanding what climate change means, what the policy says, and then to focus on adaptation. Since adaptation takes place at the local level, this is where it is extremely important to include the local communities, their perspectives and knowledge, into making adaptation strategies. Initiatives should be coordinated, information shared, and collaboration with government line departments is important. Working in isolation is detrimental to the vulnerable communities who need the information and training to make the necessary adaptations at local level. Adaptation measures will vary with the sector concerned. Coastal adaptation is not the same as what is required for agriculture, so the challenges also differ in terms of action required to meet the uncertainties of changing weather patterns.

Stakeholders have an important role to play in climate change mainstreaming. And a broad based consultative process which includes the perspectives of a diverse range of people is necessary for a wide outreach of the issue. Women, vulnerable communities, and those who bear the impact of climate change are primary stakeholders who must be included in the policy making process.

There is a wide range of institutions which can provide support to the climate change mainstreaming process. Scientific technical organizations, research institutions, advocacy groups, and gender and environment activists who can offer trainings, forums, and networks to support the mainstreaming process.

Section 2: Policy instruments and mechanisms

Concern over the environment became a global issue in 1972 after the Stockholm Conference and the Brundtland Report which focused on natural resources and sustainable development. In Pakistan the National Conservation Strategy through a broad based consultative process, was the main instrument in mainstreaming environmental issues. Experiences of the NCS could provide guidelines for the mainstreaming of climate change as well, since climate change is part of the larger sphere of the environment, and the existing mechanisms, institutions, and legislation could be realigned to include climate change.

At the moment the main policy document on climate change is the draft climate change policy itself. Other important documents related to climate change are various strategies, research papers of different institutes, global studies, and reports of the Task Force constituted from time to time which are all essential to support and inform policy.

Climate change has yet to be made a national priority, in spite of the new Climate Change Ministry, and the draft Climate Change policy, and a lot needs to be done to bring this issue into the national agenda. The competition between economic and political issues and environmental issues means climate change does not get priority, and so it will be necessary to develop a clear position both internally and externally on this issue so that its importance can be recognized at the national level. And unless the social aspect is included in pro-growth policies, the long term cost to development will continue. Therefore, all national policy documents should be reviewed and adapted to each province through provincial and district consultations and brought in line to include climate change as a core issue.

Coastal areas of Sindh and areas of intervention

The coastal areas of Sindh have already begun experiencing the impact of climate change. It is thought that the rise in sea level and sea intrusion is a result of climate change, which has made the coastal communities vulnerable and insecure to natural hazards such as cyclones, tsunamis and changing weather patterns. The mangroves which grow along the Sindh coast have been degraded by cutting and the lack of fresh water to the delta, and their forest cover has decreased. National and provincial plans do focus on the coastal areas, but not as a core area, and the fishing communities are neglected. Thus, development policies must recognize the linkages between climate change and the coastal belt.

Experiences of the past and projects with successful outcomes can be used as models to mainstream climate change. Basically the local communities must be involved in the planning and implementation of any project for it to be effective and successful. New initiatives should be encouraged, and existing systems must be used to reach the micro level, and pressure groups can be formed to raise the voices of the people into the policy planning and mainstreaming process.

Entry points for intervention should be identified according to the geographic area of a place and existing policy must be reviewed to see how it addresses this issue, and then advocacy should be planned in coordination with relevant stakeholders to take the sector's issues forward. Tangible interventions should also be considered such as changes to infrastructure. Simple local solutions should be sought to guide the people to make realistic adjustments to their lifestyle. And a clear understanding of scientific and indigenous knowledge is needed together with technical information to support any intervention at the household or district level.

Section 3: Mainstreaming of climate adaptation into policy making and planning

In order to mainstream climate change adaptation into policy making and planning the issues identified above must be addressed. And in addition to those, although Pakistan's contribution to global green house gasses emission is negligible, it still bears the impact of climate change. And industrial pollution, vehicle pollution, and lack of regulations will add to the increase in emissions, so we must prepare to reduce these in the long term, and work towards lowering these emissions. Therefore it is important to be a part of the global debate on climate change, to build resilience at the local level, and to develop strategies towards adaptation and mitigation.

For any social or ecological adjustments to be made the climate change policy has to be made public and disseminated. Then the Action plans can be viewed and social and ecological adjustments can be formulated. This requires a greater understanding of the issues, and whatever initiatives do exist on a small scale their scope should be increased. The knowledge base has to be deepened because although the challenge is global the responses and adjustments are at the local level. However, the coastal sector appears to be the only place where adaptation measures are taking place. And priorities regarding resource allocations are determined by the government according to its current priorities, so the competition between economic needs and social development remains an issue.

The main focus of the government at the moment is on adaptation, because the effects being felt as a result of climate change are those which require adaptation responses. Sea level rise, glacial melt, and changing weather patterns are the impact of climate change and so adaptation plans and strategies need to be developed and put into place quickly to build resilience and be prepared for these future. A few initiatives are being taken at the Union Council level in Sindh, but in general the impact of climate change has not been understood by the communities themselves, so although they may be responding to the changes on their own, they are unaware of how to respond or adapt in a strategic or consolidated way.

Plans to hold Roundtables through a multi stakeholder forum are being made at the federal level to take the policy towards implementation, by assessing the strength of the organizations who will be involved in this process. Once climate change is recognized as a priority, then with the support of the Ministry institutional mechanisms can be put into place at the Union Council level for implementation. Hardly any feedback mechanisms exist at the Union Council and District level for the people to participate in the policy making process. This must be addressed both in terms of capacity building of the individuals who work at that level to be able to know how to give feedback, and there have to be mechanisms in place to take this feedback to the appropriate forum.

Annex

S. No.	Groups	Climate Change Adaption Project Political and Institutional Analysis in Sindh		
		Key Informants		
	Organization/ Department	Designation	Name	Contact details
Federal Government				
1.	Ministry of Climate Change	Director General (Climate Change & Environment)	Jawed Ali Khan	051-9245528/ dgmoenv@gmail.com / Local Government Building, G-5/2, Islamabad
2.	Ministry of Climate Change	Secretary	Mujtaba Hussain	Card not available
Provincial Government				
3.	Sindh Coastal Development Authority (SCDA) Planning & Development Department, Government of Sindh	Director General	Muhammad Haneef Pathan	021-99204660/ 021-35681318 cda_s@hotmail.com
	Sindh Coastal Development Authority (SCDA) Planning & Development Department, Government of Sindh	Consultant (Agriculture, Planning & Engineering)	Shamsul-Haq Memon	021-99204660 cda_s@hotmail.com
4.	Environment Alternative Energy Department of Sindh	Secretary	Mir Hussain Ali	0333-2202030 021-35070871
5.	Irrigation Dept. Govt. of Sindh	Secretary	Babar Hussain	Card not available

			Effendi	
6.	Sindh Forest Department	Additional Secretary	Ijaz Nizamani	Card not available
7.	Planning & Development Department, Sindh Secretariat	Assistant Chief (Environment)	Muhammad Saleem Jalbani	021-9217756 0300-2772763 msjalbani@yahoo.com
Academic Institutions				
8.	Applied Economic Research Center (AERC)	Professor	Kaiser Bengali	Card not available
9.	Institute of Environmental Studies, University of Karachi	Director	Dr. Moazzam Khan	sherwanis@hotmail.com / 021-99261300 ext 2305
10.	Institute of Business Management	Professor, Environment and Renewable Energy	Dr. Shahid Amjad	021-111-002-004 0300-2714260 shahid.amjad@iobm.edu.pk
11.	Pakistan Institute of Development Economics (PIDE) – Centre for Environment Economics and Climate Change	Director	Dr. Rehana Siddiqui	Card not available
Civil Society Organizations (CSOs)				
12.	IUCN - Bangkok	Regional Director Asia	Aban Marker Kabraji	+66 2 662 4286 +66 89 201 7001 aban.marker@iucn.org
13.	IUCN - Karachi	Country Director	Shah Murad Alliani	0345-2004200 021-35861540-42 shah.murad@iucn.org
14.	IUCN - Karachi	Senior Advisor Coastal Ecosystem	Muhammad Tahir Qureshi	021-35861540-42 tahir.queshi@iucn.org
15.	IUCN - Islamabad	Manager Program Officer	Javed Akhtar Cheema	
16.	Hisaar Foundation	Chairperson	Simi Kamal	Simi.kamal@hisaar.org
17.	Pakistan Fisher Folk Forum	Chairperson	Muhammad Ali Shah	0300-3380051
FOCUS GROUP DISCUSSION				
18.	Resilience Group Trust for Conservation of Coastal Resources	Social Scientist / DRM Consultant Architect / DRM Consultant Executive Director	Shalim Kamran Dost Naeem Iqbal Ghazala Naeem Zubaida Birwani	House 192- Street 73, Sector F-11/1 Islamabad 051-221-2434 naemasu1@yahoo.com
Donors				
19.	UN Women	Gender Advisor	Farhat Firdous	021-99251458-9 0345-8234506

		PDMA Sindh		farhatfirdous@yahoo.com.au
20.	Food and Agriculture Organization of the UN	National Disaster Risk Management Advisor	Dr. Faizul Bari	051-2656359 0345-8544116 Faizul.bari@fao.org
21.	Oxfam Novib Country Office Pakistan	Advisor – Livelihood and Disaster Risk Reduction	Javeria Afzal	Country Office Pakistan House 129. Street 10, E-7. Islamabad 051-8438-112 Javeria.afzal@oxfamnovibpakistan.org

Total 20 Interviews and 1 Focus Group Discussion conducted.

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