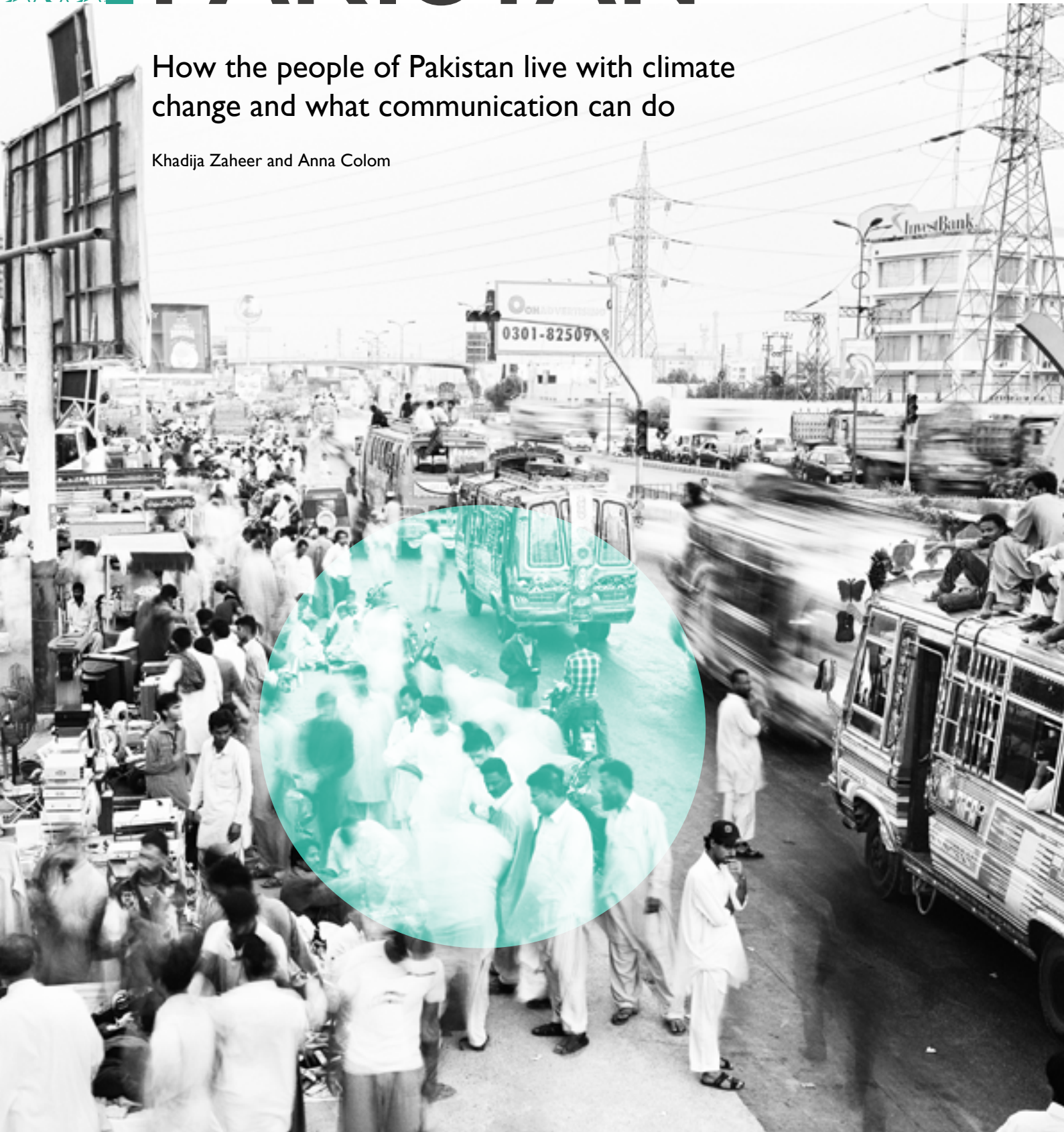




PAKISTAN

How the people of Pakistan live with climate change and what communication can do

Khadija Zaheer and Anna Colom





CLIMATE CHANGE IS ABOUT PEOPLE

How do people in Pakistan live with climate change now? How will its impacts shape their future, and how will they, in turn, shape their environment? What are the most effective ways to support people to adapt to climate change, and how best can the media, governments, organisations and businesses communicate with them?

These are the questions behind Climate Asia, the world's largest study of people's everyday experience of climate change. The project surveyed 33,500 people across seven Asian countries – Bangladesh, China, India, Indonesia, Nepal, Pakistan and Vietnam. This included 4,128 households and 17 opinion-formers and experts in Pakistan,¹ and their experiences are at the heart of this report. We also held 16 focus group discussions and five community assessments² across the country. Our research took us to Pakistan's bustling cities, each with its own flavour and character, small fishing villages dotting the coastline in Sindh, Balochistan's stark and arid landscape, Punjab's fertile lands and flood plains, and the steep mountain ranges of Khyber-Pakhtunkhwa (KPK) and Gilgit-Baltistan (GB).

Using both quantitative and qualitative research, we have built a nationally representative picture of how different groups of people in Pakistan live and deal with change. This includes their values, livelihoods, use of food, water and energy, family life, worries, what they watch and listen to, whom they trust the most, what they hope for in the future, and the environmental changes they have noticed or deal with already.

The research was conducted from March 2012 to January 2013 across Pakistan, including the nationally representative survey conducted during July and August 2012. More details on the research methodology and sampling followed can be found in the Appendix and at www.bbc.co.uk/climateasia.

¹ See Appendix for more details on the methodology.

² In this report we use the term "community assessment" to describe a qualitative research method. This method involved spending one to two days with a community and using various qualitative tools, including a guided walk with a community member, to gather information.



PEOPLE'S PERCEPTIONS MATTER

Understanding people's perceptions is crucial in order to craft communication that motivates people to take action to improve their lives. An individual's perception at any given time – for instance of changes in climate or the availability of water in an area – may differ from official records. Climate Asia research focused on people's perception of changes in climate, how these changes affect their lives and what they are doing to respond to them. Perceptions are shaped by a range of factors including exposure to media, communication with peers, personal beliefs and values and education levels.

ABOUT BBC MEDIA ACTION

BBC Media Action, the international development organisation of the British Broadcasting Corporation (BBC), uses the power of media and communication to support people to shape their own lives. Working with broadcasters, governments, other organisations and donors, we provide information and stimulate positive change in the areas of governance, health, resilience and humanitarian response. This broad reach helps us to inform, connect and empower people around the world. We are independent from the BBC, but share the BBC's fundamental values and have partnerships with the BBC World Service and local and national broadcasters that reach millions of people.

HOW CLIMATE ASIA CAN HELP

Climate Asia, a BBC Media Action project, is the largest-ever quantitative and qualitative research study into public understanding of climate change in Asia. Funded by the UK Department for International Development (DFID), Climate Asia interviewed over 33,500 people across seven countries – Bangladesh, China, India, Indonesia, Nepal, Pakistan and Vietnam. The resulting comprehensive data set paints a vivid picture of how people live with climate change now.

This report is one of many tools created from this unique data, all designed to help the planning and implementation of communication and other programmes to support people to adapt to the changes they face. They are available on the fully searchable and public Climate Asia data portal, www.bbc.co.uk/climateasia, including a climate communication guide, information on Climate Asia's research methods and the tools used to conduct research, including the survey questionnaire. Since all of Climate Asia's data and tools are designed for the widest possible use, this report and data portal details are freely available to anyone who might be interested.



WHAT'S THE STORY?

PAKISTANIS FEEL THE IMPACT OF CHANGES IN CLIMATE NOW

Life has got worse in the past five years: this is the opinion of more than half (53%) of Pakistanis. This is in stark contrast to the citizens of five of the other six Climate Asia countries who believe that life has improved. Nearly half of people in Pakistan (44%) also feel that changes in climate and environment have an impact on their lives now – a higher percentage than in any other Climate Asia country. This includes the inter-related effects of increased temperatures, erratic rainfall, increased extreme weather events and increased pests and mosquitoes.

For instance, erratic rainfall is damaging crops and reducing access to water for drinking and irrigation, while increases in pests and mosquitoes have an effect on both agriculture and the health of people and livestock. These issues are aggravated by the country's other difficulties, such as high inflation, and people's serious concerns about lack of electricity and staying healthy.

In Pakistan, where religious values are important, people often ascribe changes in climate and extreme weather events to the will of God, and 65% don't know what the term climate change means.

Pakistanis have the lowest level of confidence in government among Climate Asia countries (70%) and people see lack of water, food and disrupted energy supplies as a failure of government. However they are taking more action than people in many other Climate Asia countries to deal with the impacts they face. This includes supplementing income, using technology to improve soil fertility, recycling water and using renewable energy.

It is striking that communities that work together cope much better than those that do not. Our research also found that support from civil society organisations or non-governmental organisations (NGOs) and access to financial resources can influence people's capacity to take action.

People who live without these sources of support and information, however, are not able to cope and feel helpless. Limited decision-making power also constrains women's ability to act, although they tend to respond more actively than men to lack of food and water.

People's experiences also differ widely depending on where they live. For example, people in Balochistan perceive decreases in rainfall, water availability and agricultural productivity, while people from Sindh perceive increased extreme weather and rainfall. Those living in large cities



are most concerned about a lack of electricity and fuel, while lack of food is the biggest concern in rural areas, and particularly for women.

WHAT THIS MEANS FOR COMMUNICATION

Communication can play a key role in supporting people to respond to the impacts of changes in climate by increasing their knowledge and awareness of the issue, its causes and its implications. People have indicated that they need practical information on action they can take, including saving water, changing farming practices to improve crop yields, or learning alternative skills to supplement their income. They would also like government support for making such changes, as well as for irrigation infrastructure, livestock management, water and energy supplies.

Communication can help provide this by creating platforms for dialogue between citizens and government. There is also an opportunity for communication initiatives to share examples of communities that have successfully taken action, and to support people to build on existing financial and infrastructure activities run by government and various organisations.

Media and interpersonal communication are both important communication channels in Pakistan. Television is the most accessed medium in both urban and rural areas, despite some rural areas still being unable to access television or electricity. People from rural areas trust members of their communities the most and would like to receive information from them as well. Mobile phone usage is relatively high in Pakistan, and phones are used for calling and texting.

The research identified three key audiences in Pakistan – women, farmers and young people aged 15–24 years – each with different communication needs. Women, for example, can use practical information on how to address changes in the availability of food, water and other resources at the household level, keeping their resource and decision-making constraints in view. For farmers, support should include practical information on dealing with reduced agricultural productivity and alternative livelihoods to supplement their income. They are also interested in efficient use and recycling of water.

HOW TO USE THIS REPORT

This report explores how people live and deal with environmental and resource changes in order to understand their communication needs and help them respond to changes in climate.

The first section highlights people's perceptions that life has worsened and that the availability of resources has decreased while inflation has increased. Section 2 contains statistics on people's perceptions of changes in climate, including temperature, rainfall and extreme weather events, as well as their knowledge and understanding of climate change. It also highlights views on government and overall trust in institutions.



In sections 3 and 4, the report details how people are responding to change and the factors that enable and constrain response. This includes how informed they feel and the extent to which they are engaged in their community.

Section 5 highlights how different stakeholders can use these insights to craft communication that supports people to respond to changes in climate.

Section 6 includes an analysis of segments – groups derived through analysis of Climate Asia data that can be used to help stakeholders understand people’s needs – as well as to identify communication opportunities to enable effective action.

Section 7 focuses on people’s preferences for particular types of information, the formats in which it is presented and channels of delivery. It also contains new statistics on Pakistani people’s use of different media.

Section 8 provides further guidance for stakeholders looking to communicate with people by describing three examples of priority audiences – women, farmers and young people. The specific communication needs of these audiences are then highlighted by utilising the segments from section 6 and other Climate Asia data.

The report concludes by highlighting how to use the information, insight and tools generated by the Climate Asia project to communicate with target audiences.



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LIFE FOR PAKISTANIS

This section briefly outlines how people in Pakistan live, how they currently view their country and the values and beliefs they hold.

According to the global Human Development Report 2013 by the United Nations Development Programme (UNDP), Pakistan ranks 146 out of 186 countries and territories.³ Pakistan's Human Development Index (HDI) is below the South Asia regional average⁴ and is similar to 10 years ago, in 2003, when it ranked 144 out of 175 countries.⁵

The poor (53%) and very poor (65%) were more likely than the comfortable (42%) or well-off (45%) to say that life had not improved.

Climate Asia developed economic categories based on people's perceptions of their purchasing power.

PAKISTAN IS HOME TO MANY POOR PEOPLE

According to Climate Asia data, almost half of respondents (43%) fell into the very poor economic category, with marked differences among rural and urban populations and people with different occupations. People living in rural areas, unskilled workers, and farmers and fishermen reported lower levels of purchasing power than those living in urban areas and those with different areas of work.

Climate Asia classified cities with a population of more than 1 million as big cities and those with less than 1 million as small cities.

³ United Nations Development Programme (2013) 2013 *Human Development Report Summary - English* [online] Available from: http://hdr.undp.org/en/media/HDR2013_EN_Summary.pdf [Accessed 30 May 2013]

⁴ Pakistan Country Profile: Human Development Indicators [online]. Available from: <http://hdrstats.undp.org/en/countries/profiles/PAK.html> [Accessed 7 August 2013]

⁵ United Nations Development Programme (2003) *Human Development Index* [online] Available from: http://hdr.undp.org/en/media/hdr03_HDI.pdf

Economic categories by demographics

	All	Male	Female	Farmers/ fishermen	Petty traders	Unskilled workers
Base	4128	2013	2025	442	158	553
%	%	%	%	%	%	%
Very poor	43	42	45	54	49	60
Poor	24	23	25	24	20	18
Comfortable	24	26	22	15	22	17
Well-off	6	6	5	5	3	2
Don't know	3	3	3	2	6	3

	All	Big cities (more than 1 million)	Small cities (less than 1 million)	Rural industrial	Rural
Base	4128	899	433	65	2731
%	%	%	%	%	%
Very poor	43	31	35	48	48
Poor	24	25	28	35	23
Comfortable	24	35	30	8	20
Well-off	6	6	4	6	6
Don't know	3	3	3	3	3

Q: What category does your household income fall within?

LIFE IS WORSE

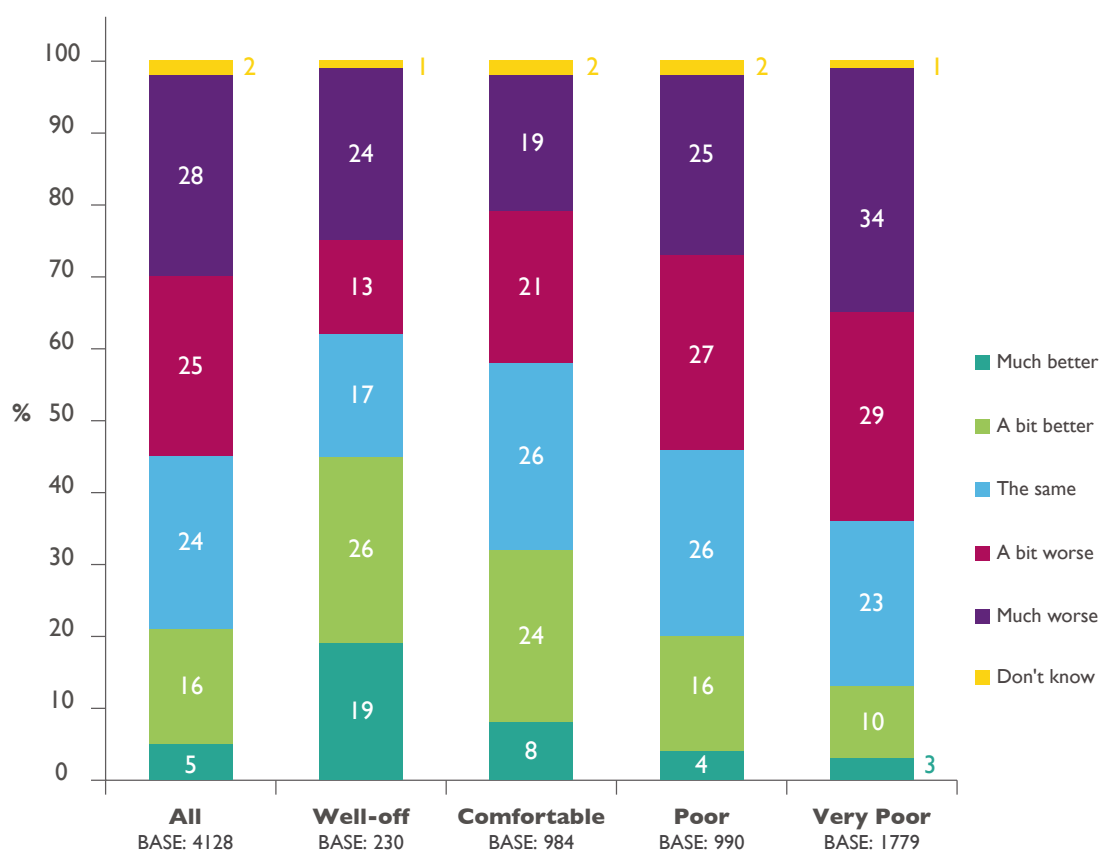
The majority of people in Pakistan (53%) feel that life is worse than it was five years ago. This is very different from the regional picture, where the majority of people feel that life is better,

for example in Bangladesh (66%) and Nepal (70%). This perception that life is worsening is particularly true for people in the poor or very poor economic groups, and for both rural areas and big cities. Those living in smaller cities were more positive. In the focus group discussions, people were angry about the state of the country and its future and also displayed a strong sense of helplessness and pessimism.

“Well our country is becoming worse day by day and the economy is becoming weaker as the time passes. I think there will be a severe problem with jobs, and if a person does not have money he would not be able to survive.”

(Man, Muzzaffargarh, rural, age 45+)

People think life is worse



Q: Compared to five years ago, would you say that your life is better, worse or the same now?

INFLATION, ENERGY AND WATER: BIG CONCERNS

Most participants linked the deterioration in quality of life with inflation, unemployment and power outages. Both men and women said that price hikes created financial insecurity and affected household wellbeing:

“Nowadays if a person is earning even RS50,000 [£291/\$466] he lives hand to mouth by the middle of the month because prices have doubled or tripled.”

(Man, Karachi, urban, age 25–34)

“We used to meet our needs easily from our earnings but now it's difficult. In homes where one person earns it is very hard for them. Apart from this we have load-shedding of electricity ... it never happened [in the past].”

(Woman, Badin, rural, age 16–24)

When people were asked to choose their biggest worry from a list, they were most worried about lack of electricity, not having enough food to eat and not having enough clean water.

However, there was significant variation in responses across gender and location. Men were more concerned than women about electricity shortages, as were people living in big cities. Lack of food was the biggest issue for women and was a bigger worry among people living in rural areas. Lack of clean drinking water and not being healthy were important concerns in both urban and rural areas.



Main worries

	All	Large cities (more than 1 million)	Cities (less than 1 million)	Rural
Base	4128	899	433	2796
%	%	%	%	%
Not having enough electricity	29	36	32	27
Not having enough food to eat	27	23	23	28
Not having enough clean water to drink	14	17	15	13
Not being healthy	11	8	13	11
Not having a suitable shelter/house	7	6	8	8
Not having enough money to spend on items for me and my family (clothes, furniture, etc.)	7	7	5	8
Not sending my kids to school/saving money for my children's future	3	2	2	3
Don't know	2	1	2	2

PEOPLE'S VALUES: FOLLOWING RELIGIOUS BELIEFS AND BEING RESPECTED

Following religious and moral beliefs (61%) and being respected in the community (61%) were Pakistanis' two most important values. Despite people's worries about economic insecurity and difficulties in making ends meet, earning as much money as possible (44%) was ranked third.

“We are Muslims, does it need a reason to be first? For a Muslim, religion is the first thing.”

(Man, Mansehra, rural, age 45–55)

In addition to religion, focus group participants emphasised the importance of education, believing that it would improve their own and their children’s lives.

“Education holds a lot of importance, in fact the most importance. If we have education, we can do anything.”

(Woman, Badin, rural, age 16–24)

Drawing on traditional values and ways of life was more important for women (47%) than for men (33%) across urban and rural areas. Health was also considered essential; people mentioned the importance of health for a productive life and for their children’s future.



CHANGES IN CLIMATE AND RESOURCES

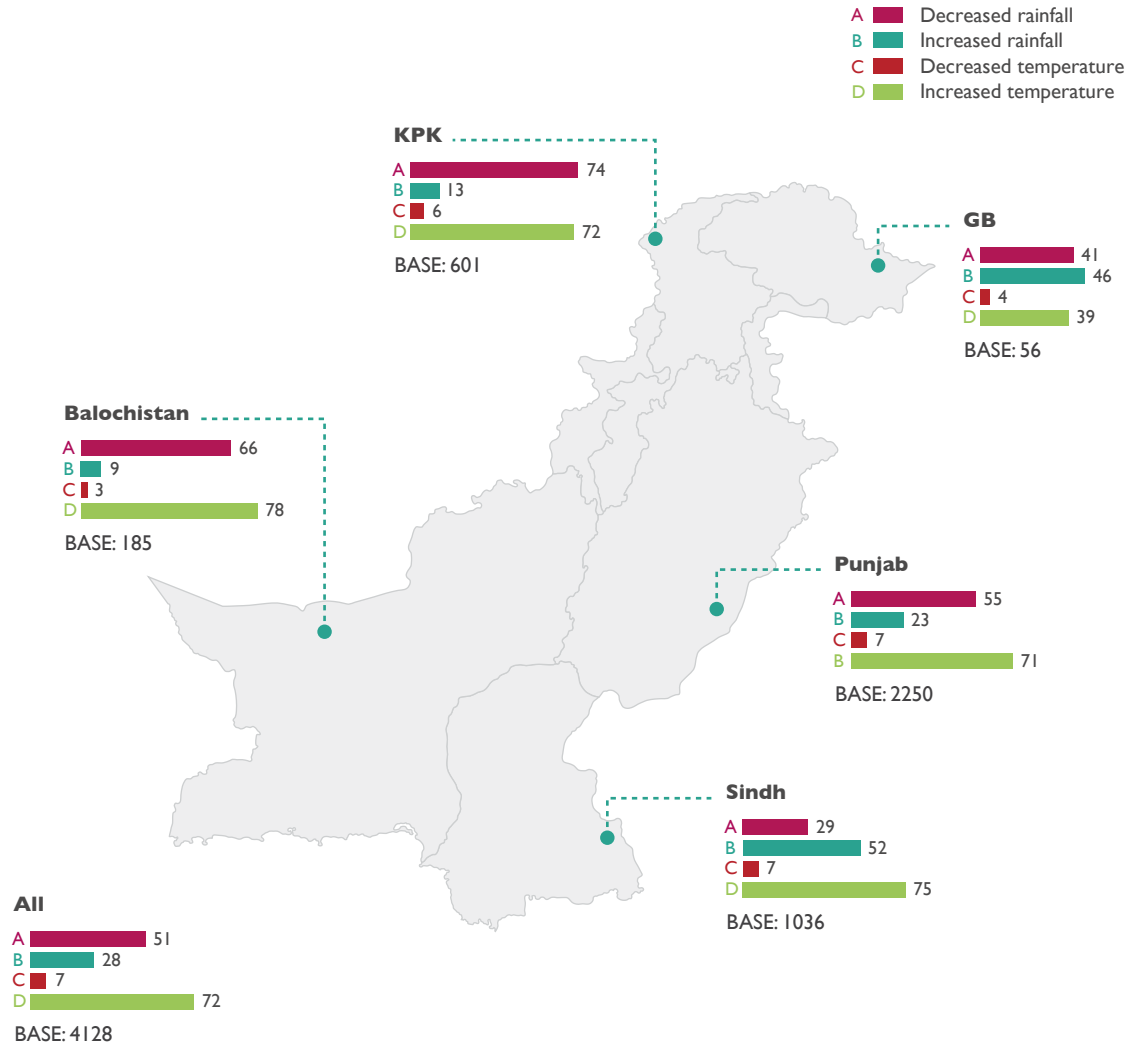
People in Pakistan noticed changes in climate and availability of key resources such as food, water and energy. This section describes the geographic, demographic and developmental factors that determine how changes are felt in their lives, including the role of government and the level of awareness of the term “climate change” among the population.

In Pakistan rising temperatures, changes in rainfall patterns, shifts in seasons and saline water intrusion are some of the main climate change impacts. In addition, there have been recurring extreme weather events. Severe floods affected Pakistan in 2008, 2010 and 2012 along the Indus river basin, with more floods occurring in August 2013.

Not everyone has heard of climate change, but changes in climate impact everyone. In order to find out how, Climate Asia first asked questions about people’s perception of changes in temperature, rainfall and extreme weather events over a 10-year period. This was followed by a series of questions about changes in the availability of key resources like food, water and energy, and changes to their environments. Finally Climate Asia asked a series of specific questions on “climate change”. This section does not include any comparison with existing meteorological or developmental records.

CHANGES IN CLIMATE: RISING TEMPERATURES, LESS RAIN

Perceptions of changes in climate by province (%)



Q: Over the last 10 years, do you think the following have increased, stayed the same or decreased?



People across Pakistan perceived an increase in temperatures and a decrease in rainfall. Overall, 43% also believed there was an increase in extreme weather events, and this was particularly noticed by people in Sindh (58%).

People blamed these changes in climate for the decline in crop productivity, food availability and income, describing how harvests were destroyed by either not enough or too much rain. As two people in focus groups put it:

“People’s land is their bread and butter. They eat out of the land as well as earn from the land. Their whole business depends upon this.”

(Woman, Badin, rural, age 16–24)

“There is less rainfall. It is a barren area, and if the rainfall does not happen, the whole harvest is destroyed ... Yes, [before] we used to have continuous rains for 9 to 10 days non-stop.”

(Woman, Badin, rural, age 16–24)

Not all seasonal variations were thought of as negative. In Khyber-Pakhtunkhwa (KPK) and Gilgit-Baltistan (GB), respondents said that shorter or warmer winters resulted in an extended cropping season. Some farmers could engage in two or three crop cycles, which increased local food availability and made livelihoods more robust.

CHANGES IN RESOURCES: FOOD, WATER AND ENERGY

Decreased availability of electricity and increased food prices were the biggest changes perceived by respondents in the past 10 years across all provinces.

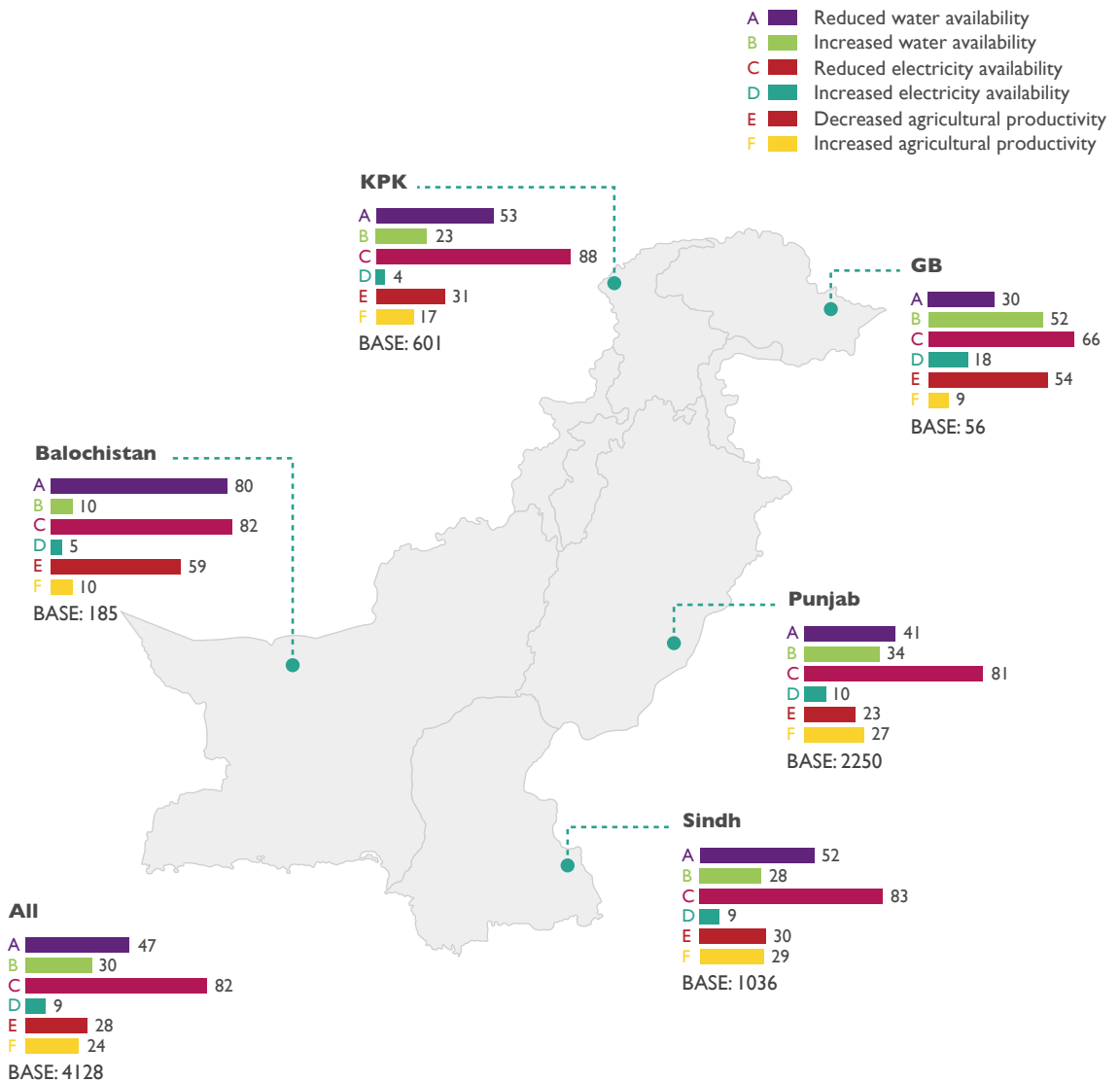
People in big cities perceived a bigger decrease in electricity, fuel and water availability than those in smaller cities or rural areas. During focus group discussions people expressed a sense of desperation and frustration.

“There is nothing left here. We don't have electricity, we don't have gas, we have an acute shortage of water, so what is left for us?”

(Woman, Lahore, urban, age 35–44)

However, people in Balochistan felt particularly affected: 66% felt their life had got worse over the last five years, while 80% perceived decreases in water availability, 82% decreases in electricity and 59% decreases in agricultural productivity.

Perceptions of changes in resource availability by province (%)



Q: Over the last 10 years, do you think the following have increased, stayed the same or decreased?

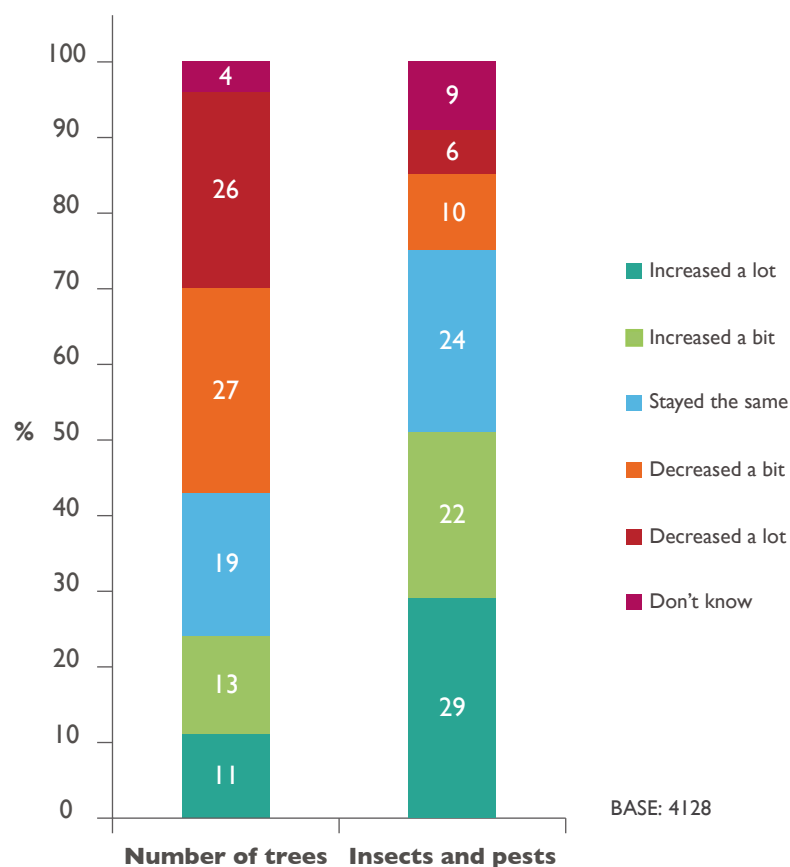


CHANGES IN THE ENVIRONMENT

Overall, people perceived a decrease in the number of trees, particularly in rural Balochistan and KPK. Some said that this was because of the need for fuel, particularly in areas without access to gas and electricity. In rural KPK, respondents identified deforestation as an important reason for increasing temperatures. However, people in urban areas noticed an increase in trees as a result of tree-planting activities.

Half of all survey respondents noticed increased insects and pests, with even higher perceptions of increases in GB (86%), Sindh (59%) and KPK (52%). In focus groups, people linked this increase to rising temperatures.

Increased insects and pests



Q: Over the last 10 years, do you think the following have increased, stayed the same or decreased?

DISCONNECT BETWEEN PEOPLE IN URBAN AND RURAL AREAS

Despite perceiving changes in climate, environment and resources, urban respondents saw themselves, and were perceived by rural populations, as distanced from environmental impacts.

“Well, mostly the problems are being faced by the people living in villages and not the city people.”

(Woman, Mansehra, rural, age 25–34)

Urban participants also felt that the social and economic pressures they faced were unique to them, and that life in rural communities was comparatively peaceful and slow-paced.

“In a way, their lifestyle is very good. They live in a tension-free environment, no fighting with each other, no noise pollution or any other kind of pollution.”

(Woman, Lahore, urban, age 35–44)

GOVERNMENT POLICY ON CLIMATE CHANGE

In 2012, the government of Pakistan approved the first national policy on climate change. The Ministry of Natural Disasters and Climate Change, in association with the provincial governments of KPK, Punjab, Balochistan and Sindh, assumed responsibility for its implementation.

The policy articulates mechanisms to tackle climate change and its impact on the country’s human and socio-economic development. However, experts and opinion-formers pointed out that there were no institutional mechanisms in place to help put the policy into operation, and this is exacerbated by funding constraints and insufficient human resources.



“Well we have seen that, both at the federal level and at the provincial level, the availability of funds is there and it is the implementation or the execution phase which is very poor in Pakistan.”

(Government official, Sindh province)

An expert in water issues reiterated this point:

“You know, we are good at making plans ... We are great planners but terrible implementers.”

(Civil society expert)

In addition to the gap between policy and implementation, the problem was seen to be compounded by a lack of long-term planning and ownership of national programmes. A few opinion-formers and experts felt that government programmes depended on the personality, focus and commitment of the individual office holder, rather than being embedded in institutions.

LOW CONFIDENCE IN GOVERNMENT

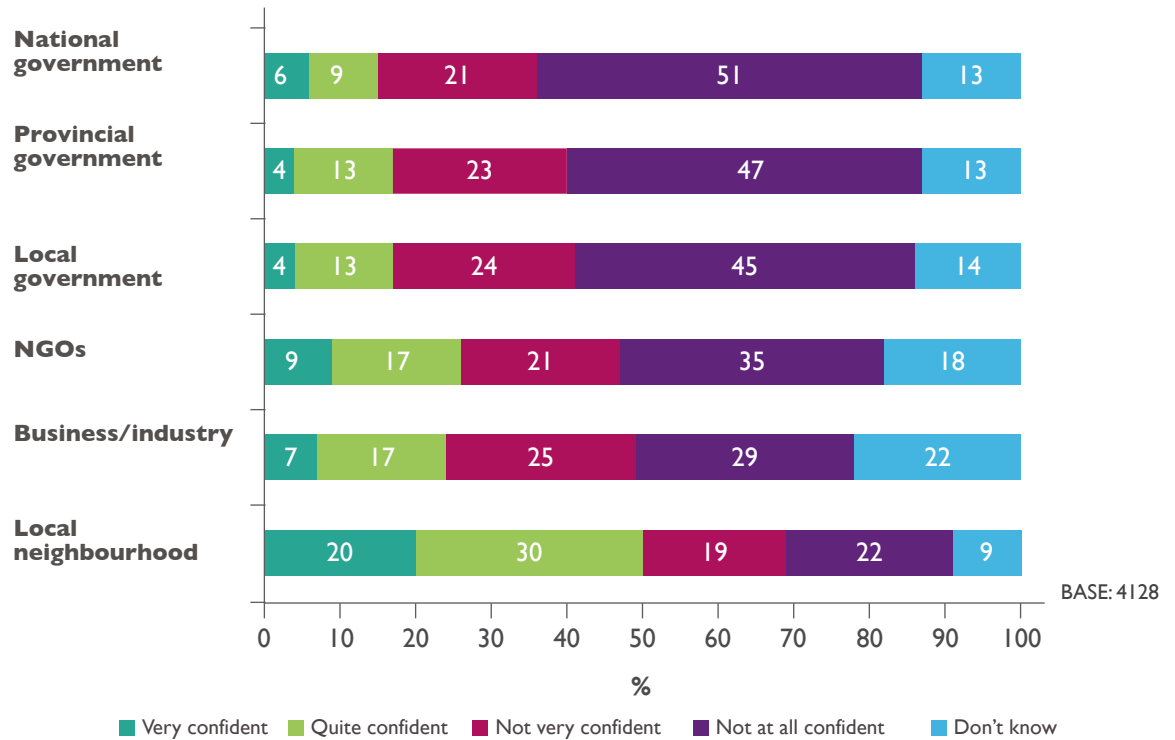
Pakistanis felt strongly that the government was not effective in taking action; 74% felt that their government did not listen to them. When asked whether the government was taking the necessary action to help people respond to changes in climate, the environment and resources, more than 70% of people surveyed said that they had little or no confidence in the government to do this. More than half said that they had no confidence at all, and this was by far the lowest among Climate Asia countries.

“There is no one to ask for help. People only come here when they want votes. They forget about us the rest of the time.”

(Woman, Badin, rural, Community assessment)

People do have a little more confidence in business, NGOs and their local neighbourhood to take action.

Confidence in organisations varies



Q: How confident do you feel that each of the following institutions is taking the necessary actions to help respond to changes in water, food, energy supplies or weather? Are you confident or not confident?

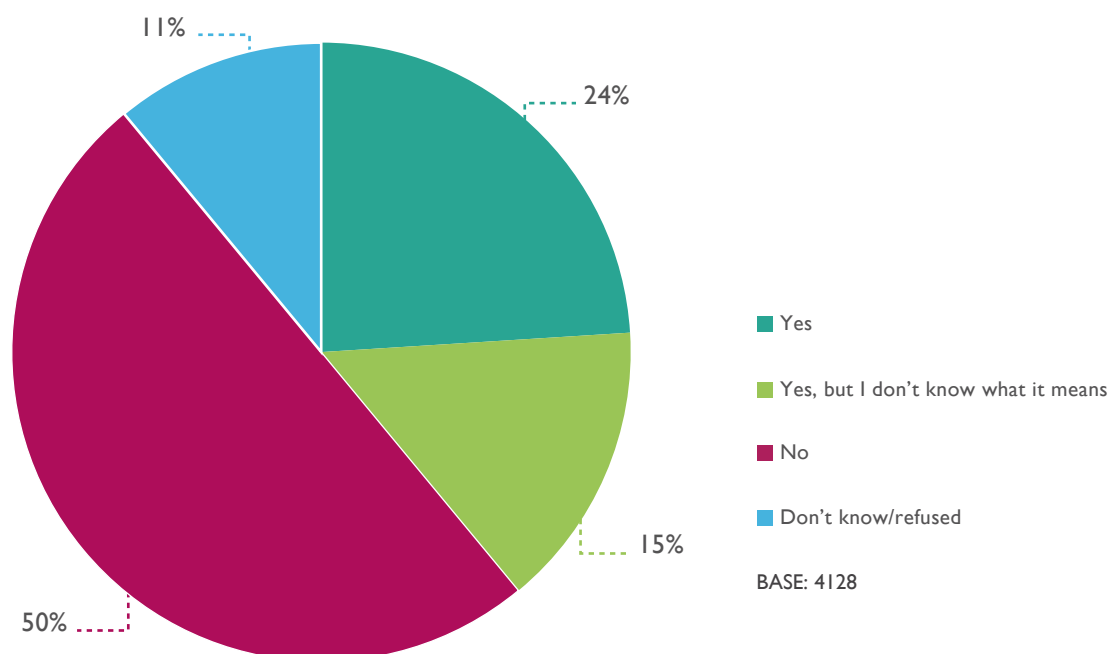
VERY LOW AWARENESS OF CLIMATE CHANGE

Despite their perception of changes in climate, most people were not familiar with the term “climate change”, with only a quarter saying that they knew what it meant. This is the lowest percentage among the seven Climate Asia countries.

Half had not heard of the term and 15% had heard of it but did not know what it meant. More people in big cities said that they knew the term (32%), compared with those in rural areas (22%) or small cities (23%).



Low awareness of the term “climate change”



Q: Have you heard of the phrase “climate change”?

Even among the people who knew and understood the term “climate change”, the majority mentioned God (64%) as the primary cause of changes in climate. People also mentioned other causes, including population growth (40%), loss of trees (33%) and human activity leading to greenhouse gas emissions (31%).

Most people had no awareness of communication initiatives around issues related to changes in climate, environment and resources: only 5% indicated that they had any knowledge of existing initiatives. This is quite different from people’s knowledge of such initiatives in some other Climate Asia countries, such as India (33%), Indonesia (32%) and China (31%).

People in Pakistan who were aware of media initiatives identified television programmes and advertisements as their main sources of information. Radio programmes and advertisements, NGO activities, religious communication and community meetings, while mentioned less often, were also identified as sources of information.

IMPACTS AND RESPONSES: HIGH IMPACTS NOW AND IN THE FUTURE

People described the impact of changes in climate and the availability of key resources on their lives. In Pakistan responses to the impacts that people were feeling were high. This section details the responses they were taking, and were willing to take across the main areas of food, water, energy and extreme weather events.

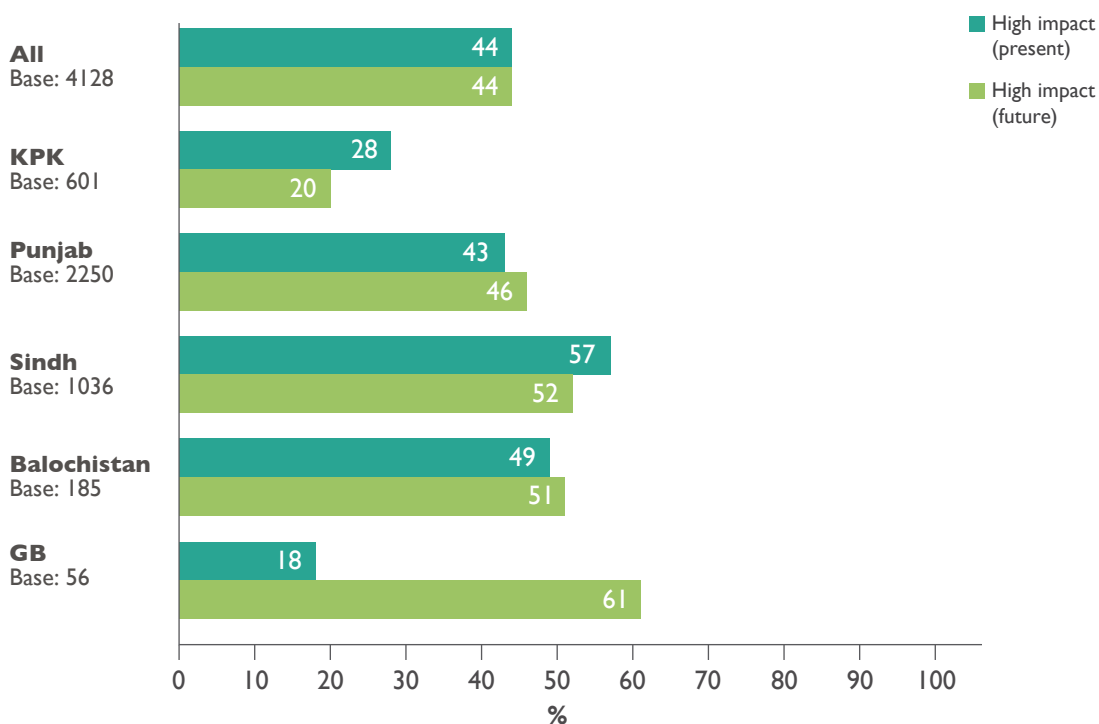
People find it difficult to distinguish between impacts associated with the availability of key resources – food, water, energy – and those associated with changes in climate. Taking this into account, questions on impact in the survey were worded as follows:

“You have just answered some questions on availability of water, food, electricity and fuel and changes in weather. The next series of questions will be asking you about the impacts that these have had on your life.”

PAKISTAN: THE HIGHEST LEVEL OF IMPACT NOW

In Pakistan, almost half of people surveyed felt that these environmental and climatic changes had a high impact (ranked 8–10 on a 10-point scale) on their lives now and would have in the future. This was the highest level among all the seven Climate Asia countries, and was particularly high in Sindh and Balochistan. It was also higher among women (49%) than men (40%), and was also high among farmers and fishermen (47%). Less impact was felt in KPK and GB.

Perceived high impact now and in the future



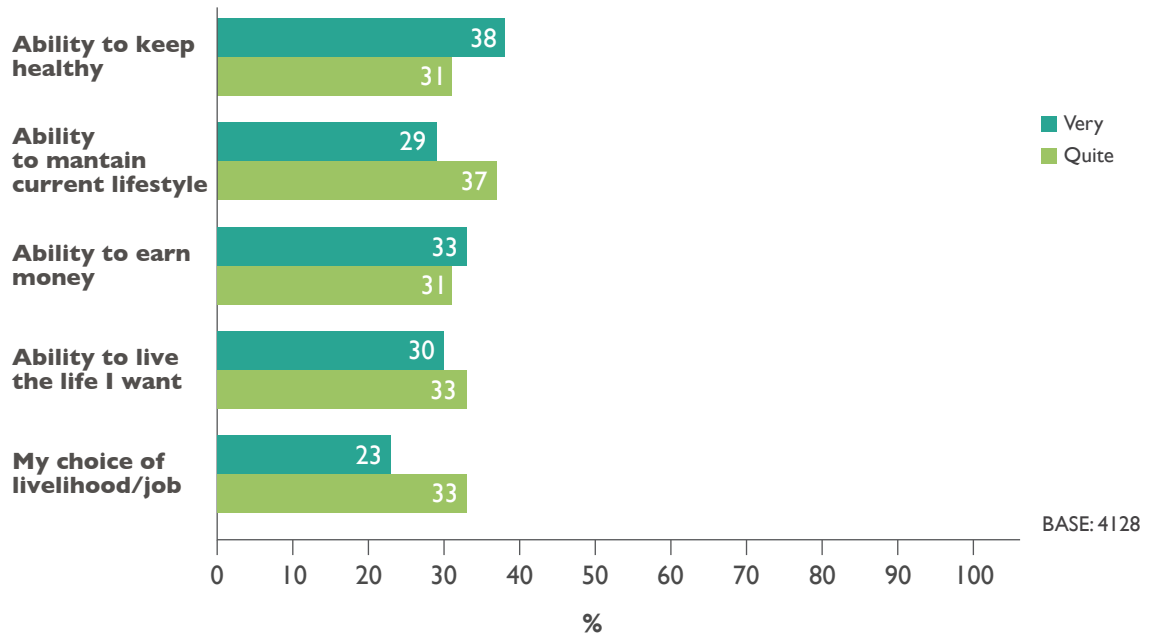
Q: How much of an impact do you feel these changes (access to food/water and changes in weather) have on your life at present? And how much of an impact do you feel these changes can have in the future?

Unlike some other countries in the Climate Asia project, however, people in Pakistan did not think that future impacts would be worse than those they already face.

HEALTH: A GROWING CONCERN

The majority thought that these changes in climate, resources and the environment had an impact on their health (69%). Women (74%) were more likely to think so than men (63%). People also thought that the changes affected their ability to maintain their lifestyle (66%) and to earn money (64%).

Impacts on priorities



Q: In your opinion, overall, how have these changes (access to food/water and changes in weather) affected your ability to do the following?

Health was people’s biggest concern; people believed that increases in mosquitoes and other pests caused an increase in illnesses such as dengue fever, malaria, diarrhoea, skin spots and rashes, as well as higher levels of pesticide use, which also affected health.

“The mosquitoes are on the increase [in August, September] and people get malaria, typhoid and there are stomach upsets and dengue fever too.”

(Man, Mansehra, rural, age 45–55)

Livestock health was also thought to be affected by increasing heat and pesticide use, as well as by drinking polluted water left by the floods. This, in turn, had an impact on people's income and the availability of food.

“We poor had goats and even they died. The business we used to do selling milk, even that is not done now. It is very hard on us. Last year most of our herd got sick and died.”

(Woman, Diplo, rural, age 25–34)

In marked contrast, none of the experts or opinion-formers interviewed in Pakistan discussed the effects of climate change on health.

LIVELIHOODS AT RISK

Respondents were asked whether they had made changes to their livelihoods because of issues related to lack of food, water, energy and increased extreme weather events.

Climate Asia's use of the terms “adapting”, “making changes”, “changing livelihoods” or “changing lifestyle” refers to people's responses to the impacts of changes in climate, key resources, environment and extreme events. Climate Asia's analysis does not include a reflection on the extent to which these changes or responses might be positive or negative in the short or long term, or how effective they might be. It does, however, assume that people need to adapt to changes.

People found that several issues affected their ability to earn money and made it harder to maintain their lifestyle:

- Changes in temperature
- Increases in extreme weather events
- Decreases in electricity, water and food availability
- Increases in food prices

Over a quarter (26%) of people, particularly women and those living in smaller urban areas, had already made changes to their livelihoods, including changing jobs. People were also supplementing income in other ways, especially in rural areas (27%). Migrating or growing alternative crops were other common changes. In community assessments and focus group discussions people explained how they were pushed to change in order to survive.

“For the future we have started to shift away from agriculture and find our livelihoods elsewhere. We are sending our children to work in the factories or outside the village to look for jobs. We can no longer depend on this land for survival.”

(Woman, Layyah, rural, Community assessment)

Changes to livelihoods

	All	Male	Female	Large cities (more than 1 million)	Small cities (less than 1 million)	Rural
Base (people who have made changes to livelihoods)	974	472	502	218	128	628
%	%	%	%	%	%	%
Changed job	47	44	50	55	65	40
Supplemented income in other ways	26	25	26	25	23	27
Migrated – changed home	17	20	15	22	14	16
Grown alternative crops	16	20	13	0	0	16
Go away from home for periods of time to earn money	8	10	6	8	9	7

Q: Have you, or your family, made changes to your current livelihood/job to help cope/deal with changes in water, food, energy supplies or weather you might be facing?

Overall, most had not made changes to their livelihoods but almost half (46%) were willing to do so. Despite the urge to change, stories collected during community assessments indicated that the poorest people often found the idea of change too risky – with limited resources people felt that they could not take such a big step.



FROM FARMING TO FISHING

In the village of Sheikh Keerio, on the coast in Badin District in Sindh, many villagers used to cultivate rice, wheat, sugar cane and vegetables. The 1999 cyclone devastated their crops and also hastened sea intrusion and lack of fresh water in irrigation canals. When this slowed their economic recovery so much that cultivating the same crops seemed impossible, some people switched to fishing. However, this also posed risks: the same cyclone destroyed boats and fishing equipment, which forced fishermen to shift from deep sea to coastal fishing.

Now, however, coastal fishing stocks and shellfish production have declined because of changes in rainfall, reduction in fresh water, shifts in tidal patterns, and more people becoming fishermen. One fisherman says:

“There is an 80% difference because of rain – before it rained a lot and the fish catch was good. The shrimp catch was about 100–120kg and now it is only 30–35kg.”

(Community assessment, Badin)

This depletion of fish stocks is threatening people’s livelihoods, and many are worried about the future. However, the villagers said that they have neither the knowledge nor the resources to cope more effectively with their circumstances. Some villagers had migrated to other parts of the district to seek alternative livelihoods and better access to water, but resettling was still a major economic risk that many were not able to take.

Climate Asia asked a series of unprompted questions about how people were responding in their day-to-day lives to changes they were noticing in climate and availability of key resources. This was followed by a series of prompted questions about specific actions they could take in response to changes in availability of food, water and energy and to extreme weather events. These questions were chosen by drawing on qualitative research and expert advice with the aim of making the responses simple and comparable across Asia.

ENERGY: PEOPLE RESPOND TO ELECTRICITY AND FUEL SHORTAGES

Lack of electricity was the biggest worry in Pakistan (29%), particularly in KPK (36%) and Punjab (33%) and in urban areas generally. It affected businesses, access to water, conservation of food and health as increased heat could lead to contaminated food.

“The meter runs with electricity, if we don't have any electricity how would we have water?”

(Man, Lahore, urban, age 16–24)

In addition, people also said that without access to electricity they could not watch television, which could mean that people had less knowledge to cope with impacts such as reduced income.

“If we get continuity of electricity in our area then the use of these means [of communication] will definitely grow. If we don't have electricity, things won't be able to reach the markets, and then how will we be aware of what you have put in front of us or what our children will learn? If there is electricity and we use the TV, then we will get awareness and knowledge about things.”

(Man, Mansehra, rural, age 35–44)

Response to decreases in energy availability was high. The majority (65%) said that they were using energy efficiently (switching off unneeded lights and fans, installing energy-efficient bulbs, etc.). Some had heard about the importance of saving energy in the media, but some also said that they had no other option because of increasing electricity tariffs.

“Well, they tell people about conserving electricity and about the use of energy savers, etc. They tell us not to waste energy, but how would we waste it if we are not getting enough for our own use ... Even if we get awareness, we don't have the resources to implement it effectively.”

(Woman, Mansehra, rural, age 16–24)

Over half of the respondents were using alternative sources of fuel for cooking (for example, bio-gas rather than wood), particularly women (59%).

Responses to energy by gender and province

	All		All by gender	KPK	Punjab	Sindh	Balochistan
Base	2303		2303	301	1307	567	99
%	%	%	%	%	%	%	%
Using renewable sources	22	Male	21	17	22	18	29
		Female	23	21	32	11	4
Using electricity efficiently	65	Male	67	62	72	61	38
		Female	63	57	62	74	35
Using alternative fuel	54	Male	51	47	51	59	38
		Female	59	71	56	62	33

Q: Which of these actions are you currently doing or have already done?

Community co-operation

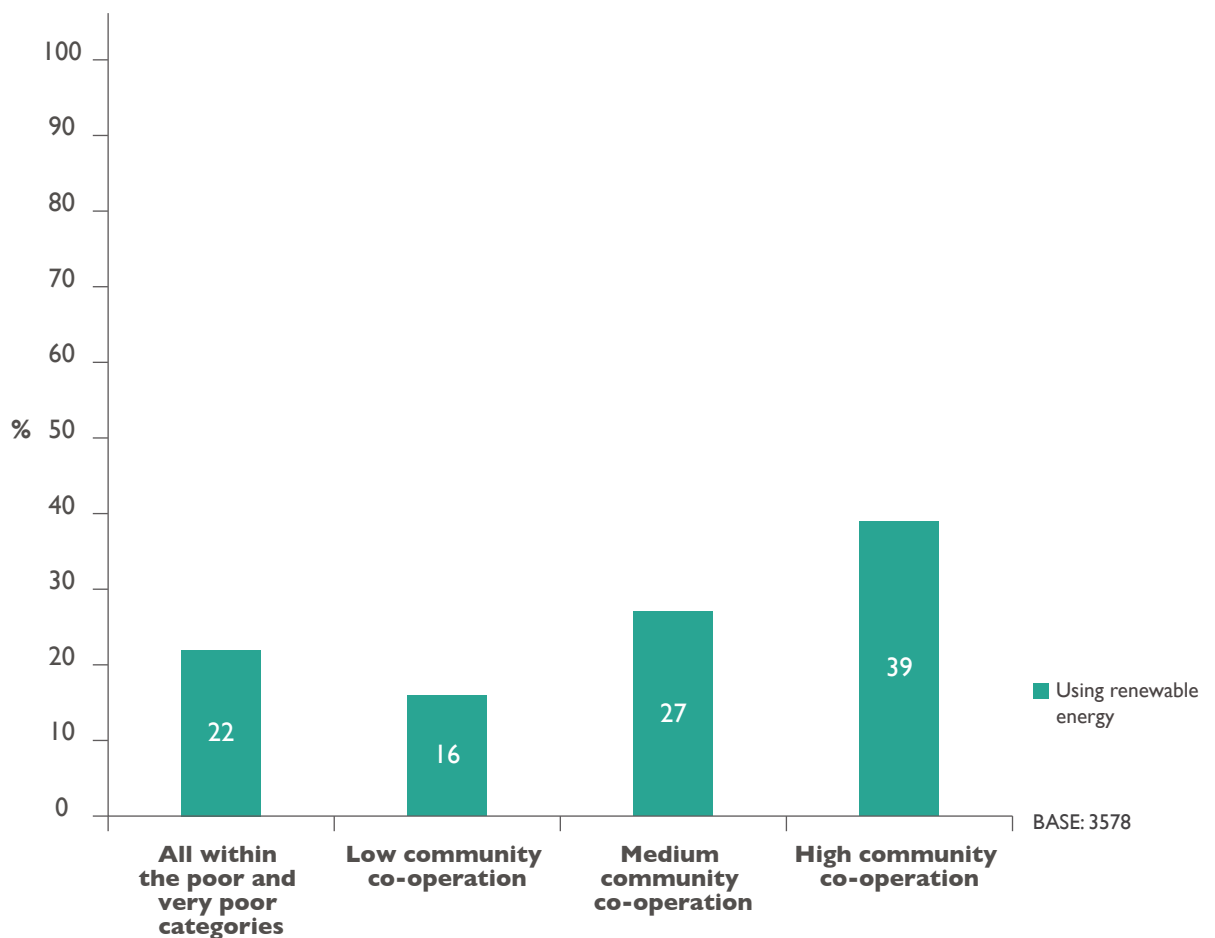
Almost a quarter of people were using renewable sources (22%), and they were more likely to be from the comfortable or well-off economic groups. However, people from the poorest economic categories were also using renewable energy sources if they had external support from NGOs and civil society organisations or if they belonged to communities that worked together. In some communities, these went hand in hand: collective action was sparked by NGOs, some saying that introducing small-scale renewable energy or water purification facilities helped to build trust and promote community ownership.

Community co-operation refers both to the extent to which people feel involved in decisions made in their community and the extent to which they feel their communities work together to solve problems.

While more people who reported high community co-operation were using renewable energy (39%), compared with those who reported low community co-operation (16%), these activities were often supported by NGO and civil society organisation activities.

In a coastal village in Badin, for example, a local NGO asked people to contribute RS500–1,500 (£3–9/\$4–14) towards purchasing and installing solar panels for lights and fans that served half of the village.

Using renewable energy and community co-operation



Q: Which of these actions are you currently doing or have already done?



FOOD: CHANGES AFFECT CROPS AND REDUCE PURCHASING POWER

Not having enough food to eat was a top worry for 27% of people, particularly women, and this was linked to unpredictable weather (too much or not enough rain) and to inflation. This had a serious impact on people's ability to buy seeds, fertilisers, food (if crops failed) and livestock, which used to provide additional income and food in crises in the past. People in some rural areas also said that agricultural productivity had decreased, particularly in Balochistan, where 59% of respondents thought that agricultural productivity had dropped.

“The changing weather has affected the crops to the extent that we cannot earn the same and meet our targets. The cotton crops get destroyed; the peppers we plant get destroyed ... Now we only get 1–1.5 bags [of peppers] when earlier we used to get 5–6 bags minimum.”

(Man, Layyah, rural, Community assessment)

People in Pakistan were also taking a lot of the prompted actions to adapt to food shortages. The majority of respondents were reducing food waste (64%), storing food for longer (63%), changing their diet (61%) and, in rural areas, rotating crops (64%). More than half of people also used technology to improve soil fertility (including changing seed varieties, cultivation methods, etc.). The high cost of seeds, fertiliser and equipment, however, was a significant barrier, especially when coupled with lack of information, fear of losing current resources, and risky future yield.

“The costs of the fertiliser and tractor, and seeds and digging water ponds, has increased from RS3,000 to 10,000 [£17–58/\$28–93]. It is too much.”

(Man, Rajanpur, rural, Community assessment)

Despite having low levels of resources, people who felt their communities worked very well together were also more likely to be using technology to improve soil fertility (55%), compared with those who reported low community co-operation (43%). Overall, men were more concerned with adopting such technology but women were generally more active in growing different types of crops, rotating crops and keeping food for longer. In Sindh, for example, many more women (82%) than men (58%) were growing different types of crops.

The research showed that even within the poorest economic groups, those who felt better informed about these issues were also more likely to be responding to lack of food.

WATER: ERRATIC RAINFALL AND FINDING NEW WATER SOURCES

Almost half of all respondents (47%) felt that water availability had decreased across Pakistan in both urban and rural areas.

In rural areas this was linked to reduced crop yields and therefore to a lack of food and income.

“In May it has never rained. But this time [it did]. Cotton was being planted and wheat was being harvested. The rain at this time is devastating for both crops.”

(Woman, Lahore, urban, age 35–44)

The level of response to water shortage in Pakistan was the highest of the South Asian countries in the Climate Asia project. People’s main responses included recycling water (77%), storing or saving water (48%), and finding a new source of water (42%). However, most people did not make water safer to drink. Women were more likely than men to respond to lack of water, especially in Sindh and KPK, primarily because women are responsible for collecting and storing water.

In focus group discussions and community assessments researchers observed that many rural communities relied on canals, wells and rainwater to meet household needs, and struggled to access and store potable water. In KPK, where access to natural water sources was difficult because of the landscape, when nearby streams dried up women had to walk great distances across difficult terrain to collect water.

In urban areas people were more likely to be finding new water supplies (52%) than in rural areas (37%). Households in cities and towns connected to the water grid experienced shortages and were installing pumps to extract groundwater and digging wells, and those who could afford it were buying bottled water. People in urban areas, particularly small cities, were also more likely to be recycling water: 85% compared with 75% in rural areas.

Responses to water shortages

	All		All by gender	KPK	Punjab	Sindh	Balochistan
Base	2303		2303	301	1307	567	99
%	%	%	%	%	%	%	%
Storing/ saving water	48	Male	21	17	22	18	29
		Female	23	21	32	11	4
Recycling water	77	Male	67	62	72	61	38
		Female	63	57	62	74	35
Making water safe to drink	18	Male	51	47	51	59	38
		Female	59	71	56	62	33
Finding a new source of water	42	Male	37	39	38	36	23
		Female	47	34	49	53	24

Q: Which of these actions are you currently doing or have already done?

EXTREME WEATHER EVENTS: PEOPLE FEEL AT HIGH RISK

Many felt that extreme weather events had increased (43%). This perception was particularly high in Sindh (57%), where 42% of people said they felt a high risk (high risk being 8–10 on a 10-point scale) compared with the 27% figure for the country as a whole.

“When I was a girl, I remember there was a big storm. It came from the sea. The waves were so high they covered my home. Everything was destroyed. Livestock was swept away. It destroyed the land and our water. We were farmers before. But not any more. Then came the storm in 1999, and after that it has been one disaster after another.”

(Woman, Badin, rural, Community assessment)

Across the country, those who were responding to extreme weather events were most likely to:

- Listen to weather forecasts (46%)
- Sign up for early warning alert services (41%)
- Make permanent adjustments to their homes (35%)
- Participate in disaster preparedness planning (32%)

Men and women tended to prioritise the same actions, except for making permanent adjustments to homes (41% men, 31% women).

People in Sindh, who perceived the highest risk of extreme weather, were more likely to be signed up to early warning alerts (49% compared with the 41% figure for the country as a whole) and to be listening to weather forecasts (56% compared with the 46% country figure). They were, however, less likely to have insurance or to have made permanent adjustments to their homes.

A fatalistic view of disasters

Overall people had a fatalistic view about the floods and felt that there was not much they could do. Research indicates that people from areas that had experienced a flood in the past five years were more likely to feel at risk and think that impacts in the future would be worse. In a community assessment in Rajanpur District, Punjab, for instance, everyone was affected by flooding and viewed it as the single greatest threat facing them. However, awareness of this threat did not necessarily result in taking action to address the situation.

Moderator: “Ok, so what did you do when this disaster [flood] occurred?”

Participant: “We pray to Allah. What else?”

Participant: “There is no way that we have [to protect ourselves]. We will just take away our children and try to save them...”

(Men, Badin, rural, age 35–44)

According to one expert, lack of education also contributes to this sense of helplessness and creates an atmosphere of fatalism, which inhibits action.



“Illiteracy is one of the reasons for this. A lot of the natural disasters that occur are attributed to the will of God. Okay, so even if you do have an earthquake or you do have a flood or you do have a change in weather. If you say that this is to do with science, scientific reasons, or that it is due to man-made causes, the attitude is ‘no, no, no this is not that, this is just the will of God, it happens.’”

(Civil society expert, Karachi)

Sparking community action

Despite an overall fatalistic approach to extreme weather events, communities with access to resources and who worked together were taking more action, such as making adjustments to homes and signing up to warning alerts. The case study below describes how an active community was able to get support and implement a disaster risk reduction plan that saved lives in the latest floods.

“THE FLOODS HAVE TAUGHT US THAT WE NEED TO SOLVE OUR PROBLEMS”

Like several other communities in Badin, the residents of Goth Muhammad Ali Chandio faced catastrophic floods in 1999, 2003, 2010 and 2011. However, unlike many others, they have collectively taken steps to safeguard their lives and assets with the help of external support.

Describing the events that forced them to take collective action, one member explains:

“The last calamity before 1999 was 24 years earlier. In the flood we were totally destroyed. Then came the earthquake in 2001, which destroyed animals, homes, crops. Water burst out of the earth where the land split. In 2003’s flood livestock and people died, our homes were destroyed; animals and birds also died. After the flood we decided to create our own emergency shelter and a safe place for livestock and storage seeds.”

(Community assessment, Badin)

The community was able to prepare for future floods thanks to a combination of community action and external support from an NGO. Since 2006 it has had a Citizen Community Board (CCB), a voluntary non-profit association organised by a local community as a way for government and local communities to jointly manage publicly funded small-scale development schemes. This CCB has 20 members, five of whom are women, and all members pay a small monthly fee of RS50 (£0.29/\$0.47) to be used during emergency situations and for any other small-scale initiatives.

In 2010, Oxfam partnered with the CCB to construct a new, elevated shelter, which is equipped with bathrooms, a storeroom and a 1,200-litre water tank. During that time, a disaster risk reduction plan was also designed.

“We were badly affected when there was no early warning, but after 2010 [flood] things have improved and we’ve really worked on our contacts and early warning. Radio news, mobile phone and loudspeaker. It keeps us updated.”

(Community assessment, Badin)



The CCB also created a list of past disasters.

“We knew that it needed to be recorded otherwise this information would be lost. And we can’t rely on anyone else so we have to help ourselves. We need to keep a record of all the hazards that we have faced and how we have faced them.”

(Community assessment, Badin)

The community had an opportunity to test their newly developed plans and skills during the 2010 flood. The CCB’s new emergency committee successfully relocated younger children and elderly villagers to the elevated shelter. Trained swimmers used tyre tubes, large cooking pots and earthen pots (“matkas”) to help people cross the canal and swim to the shelter. Looking ahead, the CCB has also tasked the emergency committee with promoting emergency preparedness in Goth Muhammad Ali Chandio. Impressive as these efforts are, the community is aware that more needs to be done if they are to combat the diversity of climatic challenges.

“If there are more shelters and raised platforms then people’s lives can be saved. We need more of these for our use.”

(Community assessment, Badin)

WOMEN’S ROLE

As described earlier, women were often more active than men in responding to the reduced access to water, food and energy. Overall, women were more worried about food shortages and food prices than men, possibly because they are responsible for household work and providing food and water.

“You know about history that women have been responsible for securing two things. First, the water supply for the family no matter how many miles they have to walk, and then the kind of subsistence that has to be done. When the man comes home he has to be fed okay, doesn’t matter how hard the woman has to work.”

(Water expert, Islamabad)

A third of women had changed their livelihoods to cope with the perceived changes, mainly by changing jobs or by supplementing their income in other ways. Even when they had not made changes to their livelihoods, they were more likely than men to think that they should. Men were more likely than women to think that they did not need to make changes, particularly in urban areas (40% of men compared with 28% of women). However, if they made changes, they were more likely than women to have migrated, either permanently or for long periods of time.

Willingness to make changes by gender

	All	Urban		Rural	
		Male	Female	Male	Female
Base	4128	605	627	1376	1138
%	%	%	%	%	%
Have made changes	26	27	29	23	28
No need to make changes	33	40	28	34	29
Have not made changes	41	33	43	43	43

Q: Have you, or your family, made changes to your current livelihood/job to help cope/deal with changes in water, food, energy supplies or weather you might be facing?

Being active and willing to change was sometimes not enough, for example in a coastal village of Badin where women felt that their livelihoods were at risk because of sea water intrusion and lack of irrigation. Their poverty and lack of say in decision-making made it difficult for them to do anything beyond survival, they said, and this feeling was echoed in many other communities.

“The heart wants [to act] a lot. We think of doing a lot but not much can be achieved.”

(Woman, Diplo, rural, age 25–34)



ENABLERS AND BARRIERS TO ACTION

This section identifies key factors that enable or prevent action in response to changes in climate and availability of key resources. It includes analysis of people's stated barriers and motivations and of factors that are associated with higher rates of response.

Our research indicates that people's economic level (their perceived level of purchasing power) influences overall responses to changes in energy, food, water and extreme weather events. Those in the poor and very poor economic groups were less able to respond.

However, when examining responses within the poorest groups, other factors also emerged as important in shaping responses:

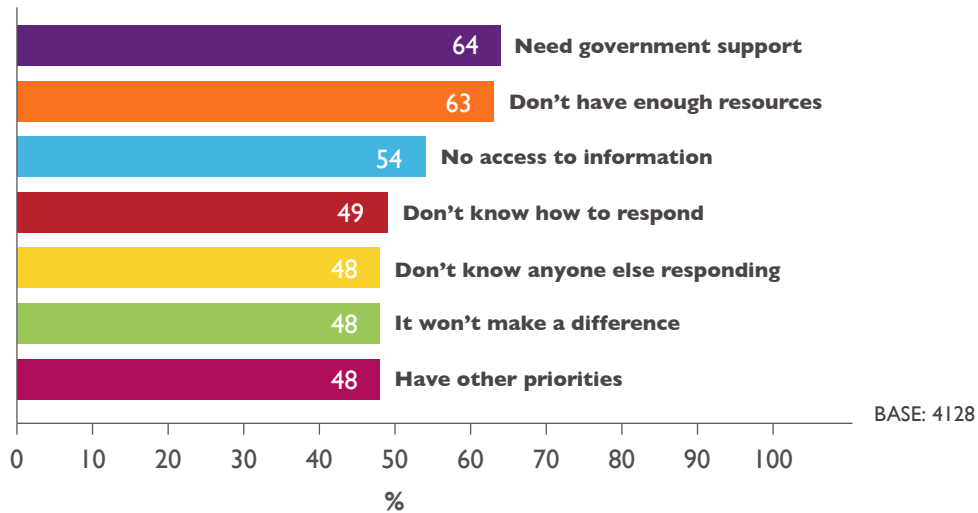
- Community co-operation
- Exposure to NGOs and awareness of existing programmes or activities on these issues
- Access to information

Each of these factors is explored in more detail in this section.

ABSENCE OF GOVERNMENT SUPPORT AND LACK OF RESOURCES

Important barriers to change include needing government support (64%), having insufficient resources (63%) and lack of information (54%). These barriers also came up during the qualitative research and were consistent across different regions and across urban and rural areas.

Barriers to responses



Q: For each statement I read out, please say whether you agree or disagree with it as a reason why you would not respond.

Many blamed government inaction for the lack of water and electricity. Focus group and community assessment participants wanted government support with irrigation infrastructure, agriculture, livestock management, water and energy supplies, as well as information on alternative livelihood skills and training. Many felt that this support would help them, if not to improve, then at least to maintain current agricultural and livestock productivity, and income. Some participants complained that even when government advice or support was solicited, nothing came of it.

“Representatives from government institutions come and talk to us. But they don't have any information.”

(Man, Layyah, rural, Community assessment)

Lack of government support was felt in both urban and rural areas. During the focus group discussions and the community assessments, participants clearly felt that provision of irrigation water and piped water, as well as upkeep of water infrastructure, fell firmly within the government's purview. However, participants in Karachi explained how people try to bore wells themselves near their homes in order to get water. Similarly, people in a farming community outside Karachi complained that they were not able to get government funds to install solar-powered water pumps.

“What more injustice can there be: we don’t have a road, we don’t have electricity, we don’t have access to health care or education, which are our basic needs. And now we don’t have water either.”

(Man, Badin, rural, Community assessment)

AVOIDING RISK AND FEAR OF FAILURE

The poorest were more likely to think that they had to change. Many had made changes but others were having difficulties making the changes that they wanted to. According to a farmer from Rajanpur (Punjab) they had no resources to change livelihoods:

“We can’t plan for the future because we don’t have any money, any savings.”

(Man, Rajanpur, rural, Community assessment)

Changes to livelihood by economic group

	All	Well-off	Comfortable	Poor	Very poor
Base	3746	204	917	908	1584
%	%	%	%	%	%
Have made changes	26	17	31	26	25
Have not made changes	41	37	37	41	44
No need to make changes	33	46	32	33	31

Q: Have you, or your family, made changes to your current livelihood/job to help cope/deal with changes in water, food, energy supplies or weather you might be facing?

From information gathered during focus group discussions and community assessments it emerged that people actively making changes to their day-to-day lives and livelihoods were often exposed to external influences. These included but were not restricted to:

- External interventions such as training in efficient farming and fishing practices
- Awareness-raising programmes supported by non-governmental and civil society organisations
- Access to social and economic safety nets, such as savings or access to credit

For example, people who had bank accounts and savings were more likely to be exploring new water supplies (63%) than those without bank accounts (41%).

Some community assessment and focus group participants mentioned their lack of financial and information resources as a reason why they struggled to take action. People were afraid that if they tried changes that didn't work this would affect both their current and future income.

“They are trying to cope with it ... of course ... without any support mechanisms they have to do it themselves. But then, you know, there would be a certain level where they would be frustrated and I think that that time is not very far away because if you don't have this government support mechanism for them to deal with these risks, and because they are living in a condition where they are already poor, and with so many other vulnerabilities that they are living with, this added vulnerability is bound to make them frustrated. And they would fall further below the poverty levels.”

(Disaster recovery and response expert, Islamabad)

THE IMPORTANCE OF COMMUNITY

Climate Asia research across the region has found that community co-operation is an important enabling factor in adapting to changes in climate, the environment and resource constraints. Despite this, almost half of people reported that they experienced low levels of co-operation (their communities did not work together or they did not feel involved). In some cases people said that community co-operation was not always easy – they found themselves arguing over limited resources, such as tenant farmers trying to influence local leaders to secure more water or favourable crop prices.



A TALE OF THREE COMMUNITIES

The community assessments provided an opportunity to investigate this factor and its implications in a number of different settings.

A proactive community working together (Chak Patyat, Rajanpur)

Chak Patyat is a small rural farming settlement on the Indus flood plain. It has no infrastructure – no electricity, gas, piped water, sewerage or health services. People who took part in our research spent most of their time discussing the floods and their impact on livelihoods and health. Despite having few financial resources, after the floods the community decided to elevate their homes using mud left from the floods and their own labour. They also built temporary dikes and shelter for their livestock. “If the floods hit again then we plan to have elevated homes so at least the families and livestock are safe,” said one woman.

Conflict over resources (Meeranpur, Rajanpur)

Meeranpur shares a border with Balochistan and has an arid and rocky terrain. Like Chak Patyat it has very little public infrastructure such as electricity, piped water, gas and sewerage. The discussion there revolved around scarcity of irrigation water and the impacts of variable weather on farming. People described conflicts over irrigation water, which were influenced by tribal and political affiliations. They also spoke about how tenant farmers attempt to build closer relationships with local leaders and rely on their influence to secure more water or favourable crop prices for themselves. During the community assessment, participants showed a strong sense of anger and frustration; they felt unsupported by the government and that their sense of community was eroding.

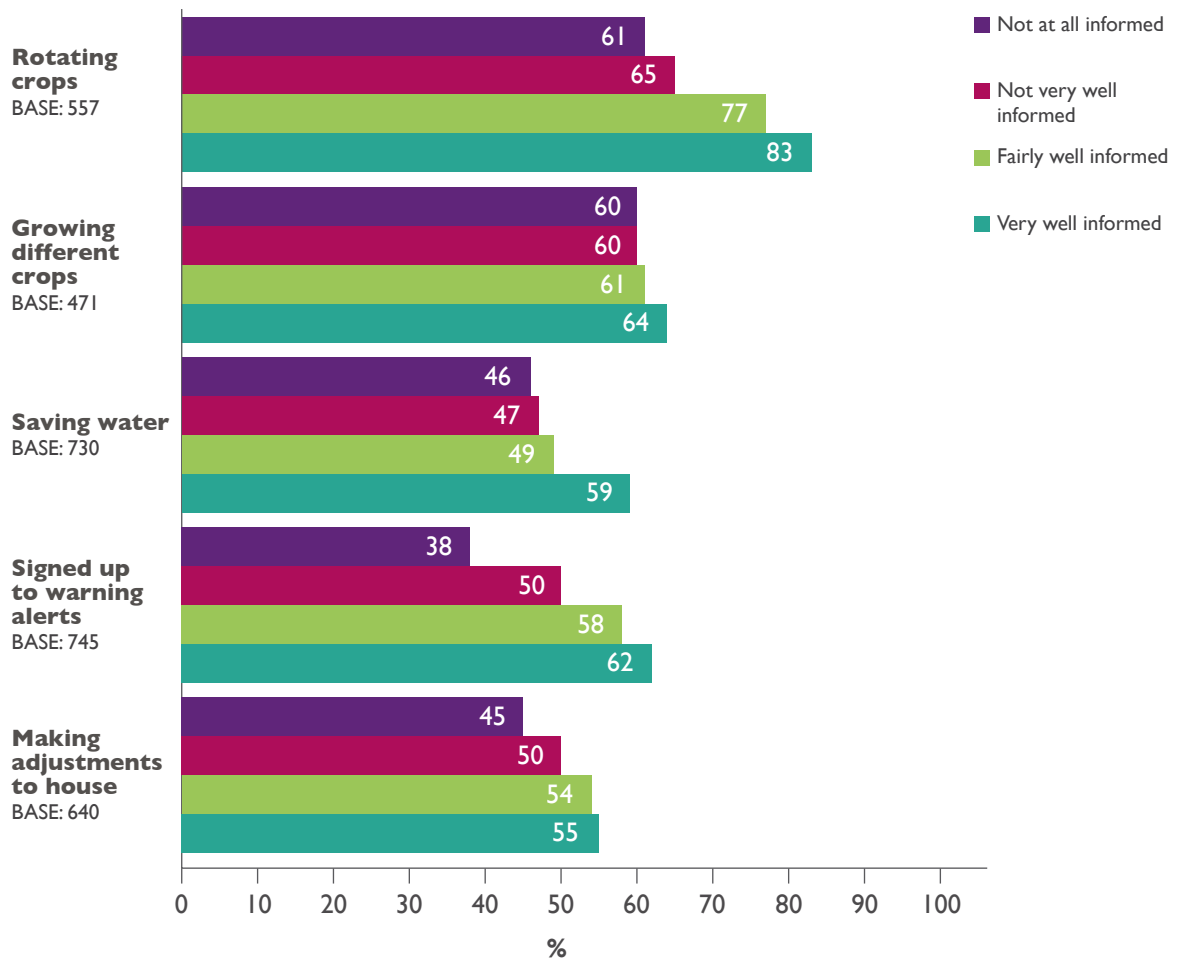
A community with support (Basti Fareed Bux Mashuri, Rajanpur)

Located on the Indus flood plain, this farming settlement was characterised by the same lack of infrastructure as the previous two communities. However, nearly all the residents own a small piece of land for farming (less than one acre in most cases) and work as tenants on larger local landholdings. While the floods adversely affected the community, their lands benefited from rich silt deposits and water aquifers were refilled. With the support of a local NGO, this community had formed a community-based organisation focused on education and post-flood rehabilitation. “I have studied till class 5 and I am the only one confident enough to speak up right now. Imagine if there were more educated people here who had studied till matric or more, they would also be speaking confidently” (male participant). This community displayed a higher sense of awareness and self-realisation than the neighbouring communities.

THE ROLE OF INFORMATION

In addition to resources and community co-operation, information was an important factor that enabled response. Even in the face of low levels of resources, those in the “poor” and “very poor” economic groups were taking more action if they felt well informed. This is the case for responses such as rotating crops, growing different crops, saving water or making adjustments to homes.

Actions and level of information



Q: How well informed do you feel about the things you could do to cope with the changes in water, food and energy that you might be facing?

In addition, 63% of those who had made a lot of changes to their livelihoods reported feeling well informed. Others felt the need to change but lacked the skills and information to do so.

“If our women would work on stitching, embroidery, etc., then incomes could increase. There must be someone to guide and help them with materials, etc.”

(Man, Mansehra, rural, age 45+)

“Communication is the key ... people need to understand environmental issues – what is the context of it all. It is not something which is just a buzzword, or something that is fashionable to talk about but it's something quite real, quite tangible ... People need to have an idea of the possible impacts it [climate change] can have on their life. And what they need to do to be better equipped to face those impacts.”

(Civil society opinion-former, Karachi)

However, over 40% of respondents did not feel well informed about how to cope with these changes. This was particularly the case for women (45%) across urban and rural areas, for those in the very poor economic group (46%) and for those with a low level of education (48%). People living in rural areas were feeling less informed than those living in cities.

Lack of information was also a factor contributing to making the existing government support less successful. In a village in Rajanpur, for example, government programmes such as the Watan (nation) card, which entitled people affected by flooding to financial help worth RS20,000 (£117/\$186), and the Vazir-e-Ala (prime minister) card relief schemes had not been particularly effective. This was thought to be because of poor information dissemination on the availability of these cards, and about eligibility and how to apply for them.

As shown earlier, people's confidence in institutions is very low. In this void, interpersonal communication is relied upon. Family and friends (85%), people in the neighbourhood (69%) and local elders (49%) are key, trusted sources of information. In contrast, only 13% identified NGOs as a source of information.

COMMUNICATION: ENABLING ACTION NOW AND IN THE FUTURE

This section draws on the findings of our research to demonstrate how media and communication can be used to help people respond to change across Pakistan.

Media and communication have real potential to support people to reduce the impact of changes in climate on their lives. They can help people build awareness, motivation, self-belief, knowledge and skills to enable them to take action. Similarly, media and communication can support communities to discuss common issues, work as a community, inform public policies and hold leaders to account. This, in turn, can contribute to stronger systems to support the public in the long run.

It is clear that communication can contribute to people's ability to secure food, water and shelter, improve economic opportunities and security, reduce risk of disaster and cope with crises.

COMMUNICATION TO ENABLE EFFECTIVE ACTION

There are opportunities for communication at the audience, community and institutional level to better support people to respond to changes in climate and availability of resources.



Audience

Introduce a new way of talking about climate change: Lack of information makes it difficult for people to respond to changes in climate. Currently, not many people in Pakistan understand the term climate change. But many experience its impacts, for example in the availability of and access to resources, and are struggling to cope. Communication can make climate change more understandable and tangible by framing the issue so that it feels relevant to people's lives. Communication can play an important role in providing practical information and guidance on how people can remain healthy, and how they can cope with the different impacts such as lack of crops, food and water.

Identify individual actions: Many people are unsure about what they can do to combat change. Although people were willing to take individual action, many thought the government should support them more. There is a role for communication to support audiences in identifying which actions individuals and communities can take and which need to be initiated at a government or organisational level.

Encourage a belief that people can do something: People in Pakistan are very worried about the impact that changes in climate and resources have on their lives and their livelihoods now. However, fatalism and the tendency to ascribe some of the changes to God meant that many people, particularly the most vulnerable, did not feel they could act. Communication that is trustworthy and is framed in people's own experiences can build confidence and promote belief in their ability to act.

Inspiration and leadership: While people were willing to respond, many of them said that they needed support or that they did not know anyone who was acting in response to these changes. Communication can also play an important role in sharing information about people and communities who are already taking action and can inspire others to do the same.

Financial resources and assets: People with more resources and higher purchasing power were among the groups taking action. Communication initiatives should support and extend this group's momentum for change by building connections between government counterparts, other public actors and on-the-ground initiatives.

Community

Community co-operation: Our research indicates that communities that discussed their issues and made consultative decisions were taking more action to address climate-related impacts and resource issues. Communication can support collective decision-making and action by encouraging community co-operation, by highlighting instances of successful collective action and by identifying local influencers who can facilitate change.

Discussion with others: Engaging people and communities in these issues by facilitating discussion is crucial to enabling response. This is particularly true for topics such as improving agricultural productivity, as small-scale farmers can benefit from each other's experiences such as growing new crops, and disaster preparedness in which communities must work together to safeguard lives and assets.

Reach influential community members: Respect and social position are highly regarded. Older men who are either educated or rich in experience tend to have social influence and may also shape community decisions. Opening a dialogue with this group might increase information flow and acceptance. Increasing awareness levels will support public discourse and help to increase the perceived need to adapt to climate change.



Institutional support

Help civil society meet people's needs: People demonstrated varying levels of trust in NGOs and their effectiveness. Some communities felt that NGO interventions were irrelevant to their lives and did not address issues they faced, while others felt that their actions fell short of what was needed. A few opinion-formers, on the other hand, felt that communities did not take ownership of NGO interventions, and failed to make a commitment to change. Media can help enable better understanding between NGOs and communities and enhance the effectiveness of joint action by promoting a better understanding of community needs and motivations to act.

Expand the reach of NGOs and local interventions: Our qualitative research indicates that these interventions helped people learn about alternative livelihoods, try new crops and agricultural techniques, prepare for disasters, as well as promoting water purification methods. Media can help amplify the success of these interventions and promote their uptake.

Hold government to account: Lack of government support was seen as the biggest barrier to response, particularly for infrastructure and resource-intensive issues such as provision of water for irrigation and access to electricity and gas. Both opinion-formers and experts felt that, although the government was designing policies, it was failing to implement them. Communication can support dialogue between audiences and governments and provide a space for institutions to be held accountable and the voice of the public to be raised.

Strengthen media: Media such as TV, mobile phones and, to a much lower extent, radio are popular in Pakistan. However, many people feel that the media coverage of these issues is inadequate. There is a real opportunity to strengthen media practitioners' understanding of these issues and support improvement in reporting of them in both local languages and English. This will help make programmes more relevant and reliable for the different audiences in Pakistan. In addition to providing information, media can also provide platforms for dialogue between governments, civil society organisations and citizens.

BRINGING IMPACTS AND ACTION TOGETHER TO UNDERSTAND PEOPLE IN PAKISTAN

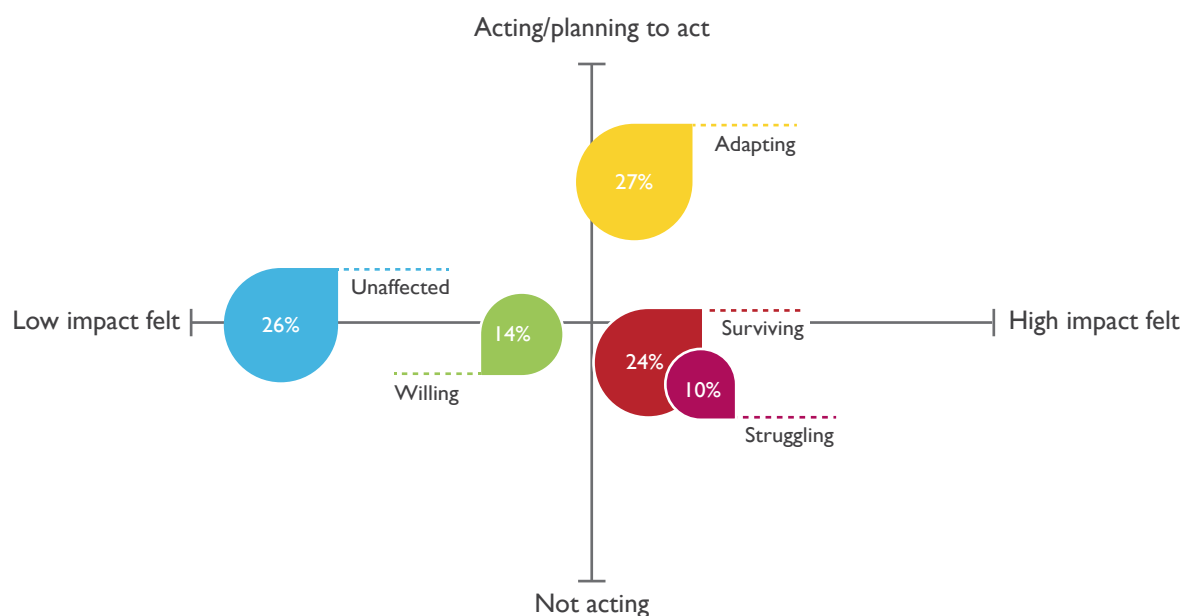
This section introduces the results of a segmentation analysis conducted by Climate Asia across the region. This analysis builds on research findings to produce insights that allow for better understanding of people's needs in Pakistan. These insights can then be used to identify opportunities for communication that encourages effective action in response to changes in climate.

People in Pakistan vary in the changes in climate they perceive, the impact they feel as a result and the extent to which they are taking action to respond to these changes.

In order to understand people's needs and identify opportunities to communicate with them effectively, Climate Asia has analysed survey data from across the region and placed people into five discrete segments, using a process called cluster analysis. Each segment varies in the factors that enable and prevent response. As such, each has different communication needs and can be supported in different ways. We have called these segments surviving, struggling, adapting, willing and unaffected.

The proportions of these segments within a country represent the extent to which people in the country perceive impacts and are taking action to respond to them.

Pakistanis vary widely in their responses to climate change



- Surviving: “Finding it too hard to take action”
- Struggling: “Trying to take action but finding it very difficult”
- Adapting: “Acting and wanting to do more”
- Willing: “Worrying about tomorrow”
- Unaffected: “Believe there is no need to do anything”

The distribution of these segments gives an indication of how people in Pakistan are coping and also signals their communication needs.

Interestingly, in Pakistan people fall into three main segments: the surviving (24%), who are feeling the impacts but are unwilling to make changes; the adapting (27%), who are taking action; and the unaffected (26%), who do not feel the impact at the moment. This is different from their neighbours Nepal, India and Bangladesh, where there are large proportions of people who fall into the struggling segment, trying to take action but finding it too difficult.

In Pakistan, perhaps because of lack of confidence in their government and other institutions, people feel that they have to make changes themselves and so are taking individual actions more quickly.

SEGMENTS BY DEMOGRAPHICS

The breakdown of the segments by key demographics shows that resources and information are playing a key role in supporting response.

The surviving segment is more likely than other segments to include people from the poor and very poor economic groups from both rural and urban areas. Women are also more likely to fall into this segment. People in the adapting segment are in a more comfortable economic position and are more exposed to media than those in other segments. People in the unaffected segment tend to be male and with slightly less access to media than those in other segments.

In addition, 10% of the segmented people fall into the struggling segment, which has a large percentage of poorer people, as well as people from rural areas and more farmers than other segments. Finally, 14% are in the willing segment and they are more economically stable and are more prevalent in the youngest and oldest age groups.

Breakdown of segments by demographics

	Total	Surviving	Struggling	Adapting	Willing	Unaffected
Base	2460	579	247	655	334	645
	%	%	%	%	%	%
Gender						
Male	55	50	53	55	54	63
Female	45	50	47	45	46	37
Economic category						
Very poor	42	45	50	34	47	41
Poor	25	25	25	26	25	25
Comfortable	25	26	22	32	20	22
Well-off	5	3	2	8	6	5
Occupation						
Farmers	11	10	17	10	12	12
Housewives	33	39	38	32	35	27
Petty traders/ shopkeepers	4	4	4	5	3	5
Unskilled workers	14	14	12	14	12	16
Teachers	4	2	2	5	4	4



	Total	Surviving	Struggling	Adapting	Willing	Unaffected
Base	2460	579	247	655	334	645
	%	%	%	%	%	%
Media Access						
None	21	22	20	17	20	23
Low	15	13	20	15	16	14
High	65	66	60	68	64	63
Urban/rural						
Urban	33	34	19	37	36	33
Rural	67	66	81	64	64	67
Province						
KPK	14	14	13	13	13	16
Punjab	56	62	43	57	43	60
Sindh	26	18	36	27	39	20
Balochistan	3	7	4	1	2	3
Age						
15-24	26	30	8	23	29	30
25-34	28	27	32	31	25	26
35-44	22	19	21	24	24	21
45-54	14	13	14	12	20	13
More than 55	11	12	16	10	8	10

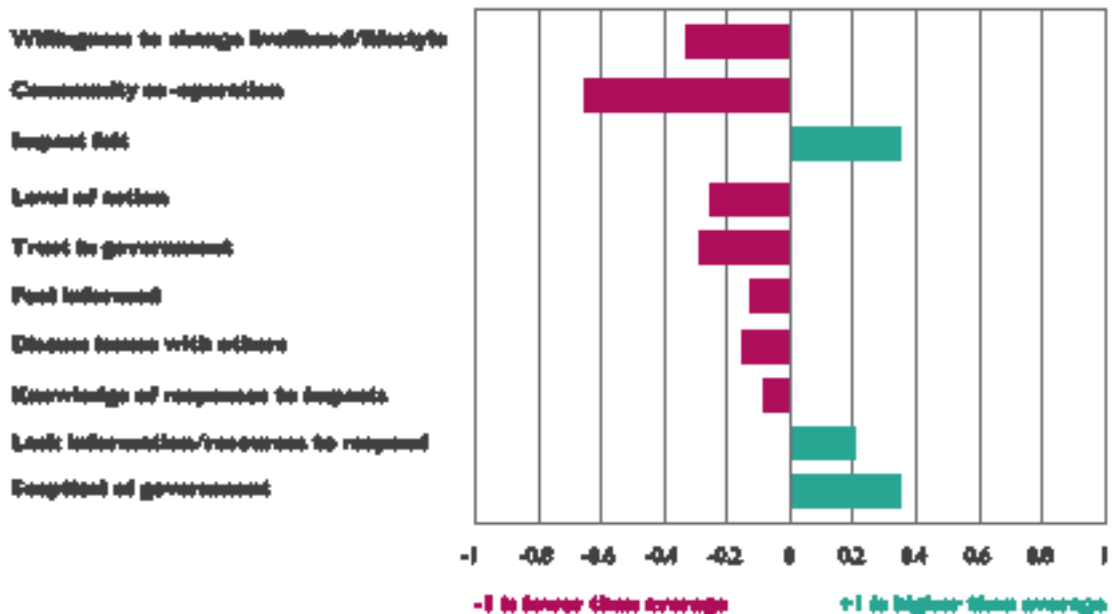
SURVIVING (24%)

“Finding it too hard to take action”

- 57% don't think that taking any action will make a difference compared with the average (48%)
- 70% don't know how to respond to these changes, compared with the average (49%)
- 98% don't feel involved in communal decision-making

In both urban and rural areas, people in this segment feel that lack of information, resources and government support are serious barriers to taking action. They do not feel that they, as individuals, have a say in community-level decision-making. Even though they are not willing to change their livelihoods or lifestyles, they are taking some actions to respond to changes in food and water, and to a limited extent, energy. They have little trust in government and NGOs.

Surviving vs the rest of the population



The figures show how different people in each segment feel about key factors determining response in comparison to the average of the other segments. +1 is higher than average, and -1 is lower than average.



Aims for communication

Increase knowledge of simple actions: Communication can divert attention away from risky resource-intensive interventions to small-scale action that may empower people and encourage them to see that simpler, more feasible responses can be successful.

Create a sense of empowerment: Communication should demonstrate initiatives based on local knowledge or showcase people or communities facing similar impacts who are successfully taking action.

Increase awareness of the issue: For communication to be effective, it must be rooted in people's experiences. By increasing awareness about the changes in climate and their potential impact, communication can encourage willingness to respond among people who might not otherwise take action because they ascribe changes to the will of God.

Encourage collective action: People with very few resources are primarily concerned with meeting their daily needs and are averse to taking risks. Research suggests, however, that discussions and planning at a community level reduces this sense of risk and encourages people to address problems collectively.

STRUGGLING (10%)

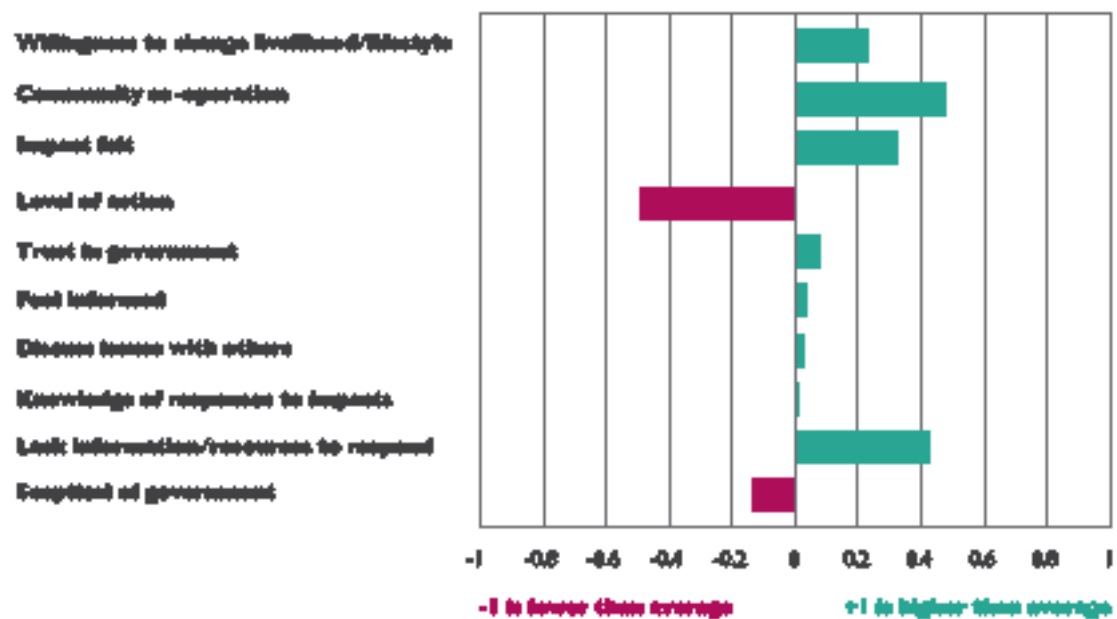
“Trying to take action but finding it very difficult”

- 87% feel that these changes in resources and extreme weather events have affected their ability to earn money
- 88% don't have information to take action, a higher percentage than for any other segment
- 80% need government support to take action, more than in any other segment

This group features a high percentage of rural people, specifically farmers and fishermen. People in the struggling segment are more willing to change than those in the surviving segment, and more engaged in communal decision-making. They are keenly aware of the impact of changes in resources and extreme weather events on their lives, and they want to respond. They are taking action, such as finding new water sources and using water more efficiently; however, they need external support for steps that require greater investment such as using renewable energy, improving water infrastructure, and changing major food and cash crops.

However, they find it difficult to take more action. Obstacles that limit their actions include lack of information, resources and government support, which many feel is particularly necessary to take action.

Struggling vs the rest of the population





Aims for communication

Inform people: Provide practical, relevant information on dealing with changes in seasons, erratic rainfall, trying new crop varieties and cultivation techniques.

Support local information networks: This group engages in discussion and is interested in working as a community, so communication should encourage information and knowledge sharing, both within the community and across community networks. Communication should increase exposure to other people and communities who are addressing similar issues and working collectively. This may not only instil a sense of confidence but might also encourage people to test different approaches to see what works, without feeling that they are putting their livelihoods at risk.

Increase access to government: Because of their willingness to respond, members of this group may be interested in long-term engagement with government representatives and local bodies to address larger infrastructure issues and resource constraints.

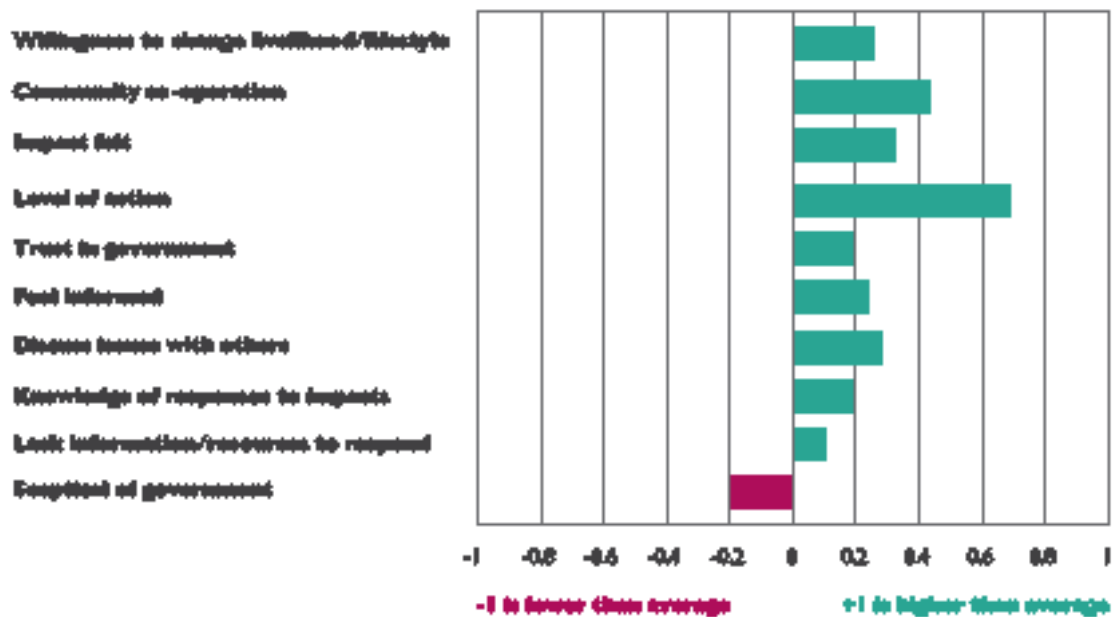
ADAPTING (27%)

“Acting and wanting to do more”

- More likely to have higher purchasing power (40%) than people in other segments
- 15% are opinion-formers or local influencers, more than in any other segment
- 63% are willing to make changes to their livelihoods
- 71% feel informed about coping with changes in resources and extreme weather events, more than in any other segment

Unlike those in other segments, people in this group feel comparatively more informed about changes in resources and extreme weather events. They also have slightly more resources, including land, and feel more engaged with their communities. Feeling concerned about the environment and their ability to maintain their current lifestyles, many of them are making, and willing to make, changes to their livelihoods. These include changing jobs, migrating, seeking alternative sources of income and using more pesticides on their crops. They are also actively storing and recycling water, looking for different water sources, and using energy more efficiently. Despite these actions and their high levels of awareness, they want to do more but feel that they do not know how to respond, and they need government support.

Adapting vs the rest of the population





Aims for communication

Inspirational role: People and communities who are adapting can inspire others in the surviving and struggling segments. Communication can utilise their experiences and knowledge to inspire other groups, particularly in relation to adapting to water scarcity.

Provide more technical information: Given their existing levels of awareness, this group would benefit from a higher and more technical level of information that encourages them to further refine and expand their actions.

Building capacity: Informed and active, this group of people would benefit from communication aimed at building capacity and increasing their skills, which would also benefit their communities. This could include developing market access for farmers and fishermen, introducing different crop varieties, promoting water- and energy-efficient agriculture, and encouraging use of renewable energy.

Planning for the future: While lack of resources may not be an obstacle for some in this group, they would still benefit from information on future planning and developing some financial security.

Increase accountability: The current actions of people in this segment can help support and strengthen communication with government bodies, and create a platform to discuss the need for longer-term responses and infrastructure.

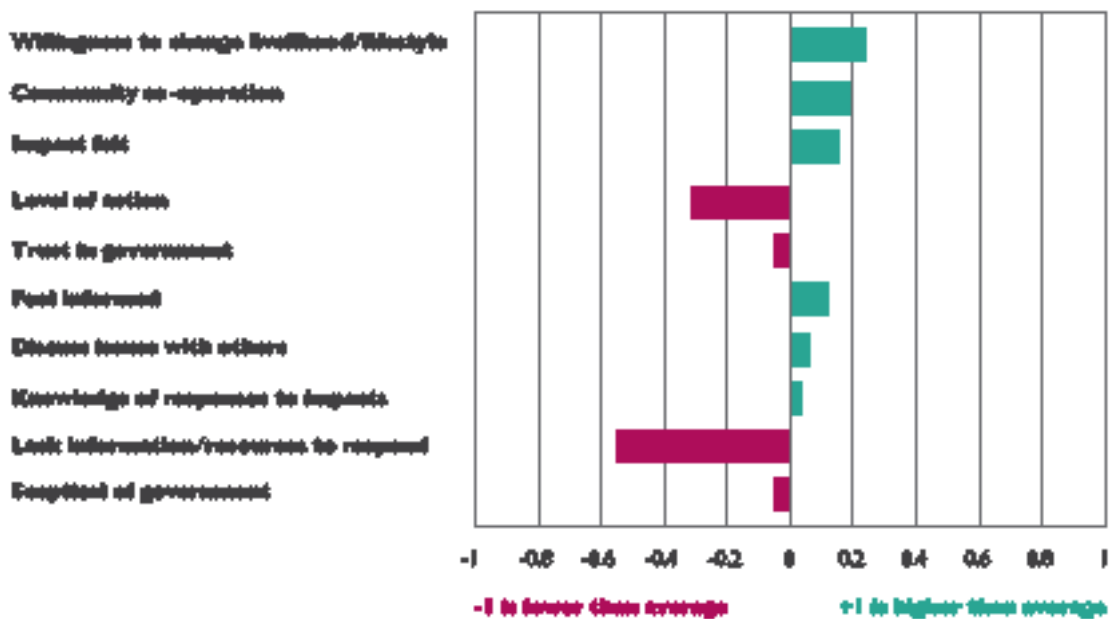
WILLING (14%)

“Worrying about tomorrow”

- 25% have some higher education (college and university), more than the other segments
- 82% feel that the changes have affected their ability to earn money
- 83% feel that they know how to respond and have access to information

People in this segment are aware of the changes in resources and extreme weather events, and their impact on their lives. They are not usually constrained by lack of resources or information but they are not necessarily taking action either. This may be because the impacts felt are still not as high as in the previous segments. High levels of information and awareness make this group an important audience for communicating the future impacts of changes in climate and resources.

Willing vs the rest of the population





Aims for communication

Information on specific responses: Communication to support this segment should provide relevant information on storing and purifying water, dealing with water scarcity, using renewable sources of energy, accessing technology to improve crop productivity, and preparing for extreme weather events.

Transform willingness to act into action: Communication should engender a spirit of action in this segment by sharing what others have learned and found successful.

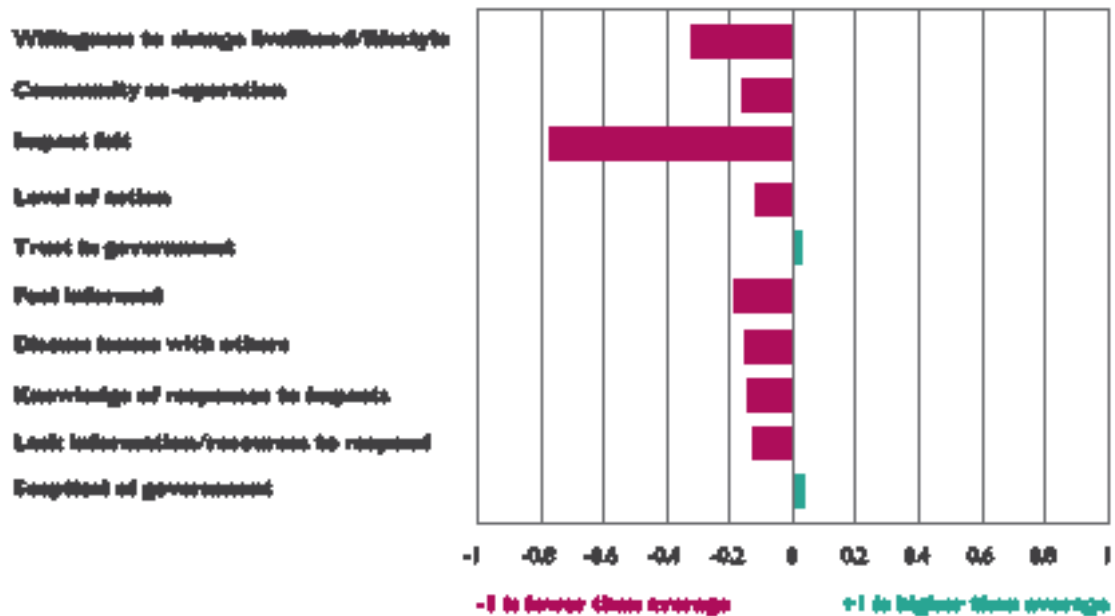
UNAFFECTED (26%)

“Believe there is no need to do anything”

- 39% say not having enough electricity is the primary worry
- 20% think life is a bit better than five years ago – a higher percentage than in other segments
- 41% are not willing to introduce changes to their livelihoods

The people in this group are not feeling the impacts of changes in climate and resources on their lives. As a result they are unwilling to make changes and do not feel it is their responsibility to take action. They are also unaware of others who are taking action, have little opportunity for discussion and largely feel uninformed.

Unaffected vs the rest of the population





Aims for communication

Build awareness of issues and impacts: Communication should focus on generating awareness of these issues and their impact. Exposure to other people's responses, in similar contexts and with similar problems, may create opportunities for discussion, help people to understand the implications of the changes in climate and resources, and encourage them to act.

Increase knowledge of simple actions: Demonstrating simple, low-cost solutions to issues may not only address the information deficit but also inform people about the range of actions that are possible.

Create a sense of community and empowerment: This can be done by demonstrating initiatives based on local knowledge, or by showcasing people or communities similar to those in this segment who are successfully taking action.

THE MEDIA AND COMMUNICATION LANDSCAPE

In order to reach people it is important to understand what they want – what media they use, who they talk to and trust and how they would like information delivered to them. This section features data on media and communication use in Pakistan.

SOURCES OF INFORMATION

The majority discussed the changes they were facing with family and friends (86%) and people in the neighbourhood (67%), while 46% talked to local influencers. Less than a third mentioned religious leaders and just over a quarter mentioned teachers. NGOs were mentioned by 19% of respondents.

With regard to media, television was the main source of information on issues around climate change, as mentioned by 74% of respondents. Radio was only mentioned by 15%, while 20% of respondents mentioned mobile phones.

When asked how people would most like to be provided with information on the issues discussed, there was a clear preference for television, although this was much lower in rural areas than in cities.



Preferred sources of information

	All	Big cities	Small cities	Rural
Base: All respondents	4128	899	433	2796
	%	%	%	%
Television (including programmes and adverts)	53	71	70	45
From members of my community	13	5	10	16
Mobile phone (including SMS)	3	3	5	3
Religious institutions	3	1	1	4
Radio	3	1	1	4
Newspaper	3	5	2	2
Neighbourhood meetings	2	1	1	3
Internet	1	1	1	0
Street theatre	1	0	0	1
Other	8	12	9	22

Q: How would you most like to be provided with this information?

People said that it would be useful to learn through television about actions that they can take to deal with their problems. For example, a woman from Mansehra (KPK) mentioned that it would be good for a TV drama to show how to collect rainwater but that interpersonal communication was invaluable for learning practical skills and this was echoed by people in other areas.

“On TV and radio this kind of interaction is impossible. And this kind of interaction I think would be most effective in imparting information to others.”

(Woman, Muzaffargarh, rural, age 25-34)

SPECIFIC INFORMATION NEEDS

Overall, most people were interested in educational programmes for children (65%), information on future impacts of changes in climate (58%) and information on responses to those changes (54%).

Urban and rural audiences had somewhat dissimilar needs for information about how to respond. Urban audiences expressed a need for information on access to insurance, saving and storing food, using water efficiently and renewable energy. Rural audiences, on the other hand, were more interested in learning new agricultural techniques, trying different crop varieties, purifying and storing water, alternative livelihoods, improving fishing practices, and disaster prevention.

HOW PEOPLE USE THE MEDIA IN PAKISTAN NOW

Recent media usage (used “yesterday or today”)

	All	Male	Female	KPK	Punjab	Sindh	Balochistan
Total base	4128	2103	2025	601	2250	1036	185
	%	%	%	%	%	%	%
TV (used yesterday/ today)	62	67	57	36	68	70	47
Mobile (used yesterday/ today)	57	75	39	55	58	60	44
Radio (used yesterday/ today)	6	9	3	11	3	9	8
Radio (don't know when last used)	21	18	24	18	22	23	21
Internet (used yesterday/ today)	4	6	2	4	4	5	0

Q: When is the last time you accessed/used the following media?

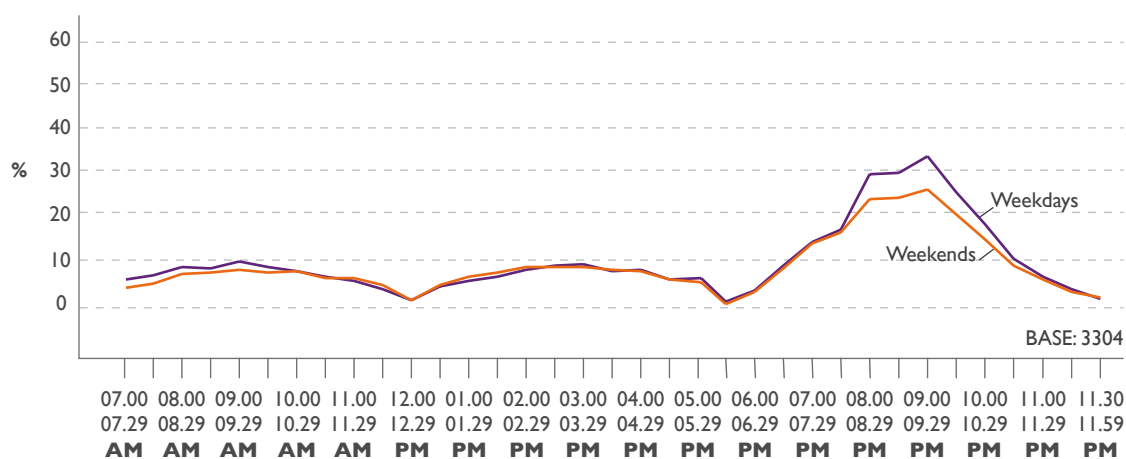
Two-thirds had accessed media in the last few days. Mobile phones and television were the most popular media but there were clear gender differences. Only 39% of women had used mobile phones in the last day compared with 75% of men.

Television: you can learn new things

In Pakistan 62% of all respondents had watched television either yesterday or today, but there were big differences between rural (54%) and urban (83%) viewership. Regionally, Sindh and Punjab had more TV viewers than Balochistan and KPK.

The peak time for TV viewing both on weekdays and weekends was 9.00–9.29 pm.

Preferred TV viewing times



A preference for news and dramas

When asked about preferred formats, 61% of respondents mentioned news, followed by drama/soap operas (53%), with similar preferences in urban and rural areas. There were clear differences by gender, however, with women more likely to say that they like to watch dramas (62%) and men more likely to mention news (67%). Drama was also mentioned most by young people.

“It could be in the form of discussion. But if a drama is made out of it to make interesting then more people would like and more would be attracted to it.”

(Woman, Mansehra, rural, age 16-24)

Mobile phones: making and returning calls

While mobile phone usage was relatively high – 57% used one “yesterday or today” – there was a big gender gap. Men (75% used it “yesterday or today”) tended to be the primary users, as opposed to women (39%).

Usage is also affected by location: the highest usage was concentrated in urban areas. In big cities, 68% used a mobile phone “yesterday or today”, and 63% did so in smaller cities, whereas usage was lower in rural areas (53%).

Mobile use, however, tended to be restricted to making and returning phone calls, particularly in rural areas. For example, a group of women from Muzaffargarh (rural, Punjab) said that most people did not know how to send text messages.

“People here just know how to turn it on and talk; they won’t be able to read messages on it ... People mostly share their family problems on it. They don’t get any news on SMS.”

(Woman, Muzaffargarh, rural, age 25–34)

However, people circulated useful information through phone calls.

“But if a friend gets some news she can inform me and I can forward to others, this can be done.”

(Woman, Muzaffargarh, rural, age 25–34)

Trends indicate that use of mobile technology, which is relatively affordable and easily available, will continue to rise in the future.



Radio: it's old-fashioned

Radio use was surprisingly low in Pakistan. Only 6% said that they had listened to it “yesterday or today”. An additional 21% could not remember when they had last listened to a radio. Overall, as mentioned earlier, only 15% said that this was a source of information on issues around climate change.

“Nobody listens to radio now ... Radio does not have much effect now.”

(Man, Mansehra, rural, age 45+)

Those who listened to it mentioned songs, the recitation of the Koran and other educational programmes on children and health. Some respondents also mentioned listening to it on the mobile phone when electricity was off and they could not watch TV.

Internet: still a new medium

Only 4% of respondents had used the internet “yesterday or today”. Although it is a medium on the rise, use was still limited to an urban and male minority. In big cities, 9% had used the internet “yesterday or today”, and 6% had done so in small cities. However, only 2% had used the internet “yesterday or today” in rural areas.

By age, younger people were, as expected, more likely to have used the internet “yesterday or today” (6% compared with a 3% average for the rest of the age groups). Despite low levels of usage, it is very probable that the number of internet users will increase over time with the expansion of subsidised internet and mobile phone service providers.

The importance of opinion-formers

Opinion-formers were identified as having two of the three following characteristics: a professional occupation, belonging to an organisation, group or association, and having influence over more than 10 people.

As mentioned earlier, interpersonal communication was important for Pakistanis and 46% said that local influencers were their source of information on these issues. Of the Pakistanis surveyed, 18% were classified as opinion-formers. These tended to be men – 12% male as opposed to 6% female – and older than the average. They were also more likely than average to have a high level of education and to be in the comfortable and well-off economic groups. They also owned more land.

The majority of opinion-formers were teachers (29%), large landowners (12%) and health workers (11%). Almost half of them belonged to an organisation or local association, compared with the 2% of people belonging to such an organisation who were not opinion-formers. The opinion-formers were more likely to know about the term “climate change” and to think it was happening. They also felt better informed about how to cope with the associated issues – 76% felt well informed compared with 48% of other people. They were more likely than the rest to know about existing communication activities on these issues.

The majority of opinion-formers (71%) said that people often came to them for advice on issues and that they felt able to help their communities.

In order to support communities to cope with changes in climate and the environment, opinion-formers were willing to increase awareness in their neighbourhoods (74%), and to share their skills and knowledge (75%).



PRIORITY AUDIENCES

The population segments discussed in section 6 – surviving, struggling, adapting, willing and unaffected – have been used to help prioritise groups of people that can be targeted through media and face-to-face communication. BBC Media Action concentrates on communication with people who perceive the highest impact now. As such, Climate Asia has identified priority audiences for this report that include significant populations among the surviving and struggling segments. Our ideas for reaching these audiences are based on an understanding of the segments.

WOMEN



Peter Barker, Panos

Distribution of women across the five segments

	Surviving	Struggling	Adapting	Willing	Unaffected
All	24 %	10 %	27 %	14 %	26 %
Women	27 %	11 %	27 %	14 %	22 %

Why a priority?

Of all the women in the segmented groups, 27% fall into the surviving segment – they are feeling the impact but don't feel that they can respond. Overall, women's biggest worries, across regions and across urban and rural areas, were food availability and food prices, followed by lack of electricity. Women in both urban and rural areas identified difficulties in maintaining good health for themselves and their families as a consequence of changes in resources and climate. They also felt that both present and future impacts of these changes are high.

“The children get blotches and pimples on their skin, people sometimes suffer from hepatitis in the summer ... Because there is no electricity we cannot store food in fridges – that is why they become ill.”

(Woman, Mansehra, rural, age 25–34)

Women were more worried about changes in resources and extreme weather events (64%), compared with 55% of men. Just over half (52%) also expressed a high willingness to change but were finding it difficult in the face of specific barriers. These included lack of money and resources (69%), needing government support (68%), no access to information (60%) and, for some, lack of participation in decision-making.



Context

The women in urban areas who were most vulnerable – the surviving group – were younger than their rural counterparts (36% under 25 compared with 27% in rural areas). They were also more worried about lack of electricity (35%); however, they were more willing to make changes than women in rural areas.

In addition, women from rural areas felt less informed than their urban counterparts and were less exposed to media.

Information sources

In urban areas television and mobile phones are popular sources of information for women, while television and interpersonal communication seem to be the preferred option for women living in rural areas.

Popular TV channels for women are very different in urban and rural areas. In big and small cities, just over half of women with access to TV prefer StarPlus, followed by Geo News (44%). By contrast, in rural areas the preferred channel is PTV Home (28%), followed by PTV News (19%), StarPlus (19%) and Geo News (15%). It is important to note that many households in rural areas did not have access to cable, which limited their choice of channels.

Radio usage is fairly low in both urban and rural areas.

Drama serials, morning shows, news, religious programmes and musical programmes are popular among women. There is a preference for story lines that are relevant to their lives, and showcase their individual and communal concerns.

“It happens in dramas, we can relate to some of the stories as if they are showing our own problems and things that happen with us ... they do a programme on FMI03 at 11 at night, in this programme the topics they give seem our own and it is related with us.”

(Woman, Muzaffargarh, rural, age 25–34)

Information needs

Women in focus group discussions and community assessments said that they would like practical information on how to address changing resources (mainly food and water) at the household level, keeping their decision-making constraints in mind.

Women in urban areas wanted to learn more about insurance, improving access to food through small-scale/indoor vegetable cultivation, and methods for storing food given frequent power outages.

Rural women wanted to learn more about alternative livelihood options, including measures and opportunities to improve income and market access as well as methods for storing and purifying drinking water. They were also interested in information and training on improving health and hygiene, especially for children, and methods for storing food given the lack of electricity.

Reaching this audience

Communication for this group should encourage women to believe that they can take action to manage food and water in the household, including practical information on how to do this within their available resources. Programmes should also address questions on health related to increased temperatures and insects. In addition, there is also a need for training in skills, such as embroidery, so that women can supplement household income. Television dramas and interactive programmes would be most appropriate for this audience. In addition, women in rural areas would also benefit from face-to-face activities and training.

FARMERS

Distribution of farmers across the five segments

	Surviving	Struggling	Adapting	Willing	Unaffected
All	24 %	10 %	27 %	14 %	26 %
Farmers	27 %	16 %	23 %	14 %	20 %

Why a priority?

Farmers' livelihoods are significantly affected by changes in climate and resources. Increased temperatures and erratic rainfall are affecting crops and, therefore, income. Changes also affect the health of livestock, reducing options to supplement income in other ways. Farmers are more likely to be in the struggling group (16%) when compared to the figure for the segmented population as a whole (10%).

Almost half (47%) perceive a high level of impact currently and are trying to adapt to the changes in climate, resources and extreme weather events. Over half think that agricultural productivity has either declined or stayed the same.



Warrick Page, Panos

Context

During the community assessments in Sindh and Punjab, farmers and livestock owners specified government support, money and more information as key needs to enable them to respond to changing resources. Small-scale farmers and agricultural labourers exhibited high levels of risk aversion – they have too few resources and almost no social or economic safety nets that would allow them to risk changing existing agricultural practices. Furthermore, many of them are so poor that their primary concern is managing household subsistence, leaving them with little room to think about future needs.

Sources of information

Television, mobile phones and face-to-face communication are farmers' preferred means of communication. Face-to-face communication means demonstrations of agricultural practices, as well as discussions with trusted community members and experts including, on occasion, agricultural extension workers, experts and NGOs. Lack of electricity remains a significant obstacle when it comes to accessing remote rural populations that are not connected to the national power grid. Similarly, literacy is another barrier when it comes to text-based mobile communication. However, despite these obstacles, radio remains the least preferred method of communication. Preferred formats include news, weather updates, information and discussion programmes, as well as comedy and entertainment shows.

Information needs

Context-specific, practical information with appropriate demonstrations of how to do particular tasks are the primary communication needs of farmers. This includes opportunities for sharing knowledge and experiences as well as interaction with local agricultural and livestock departments, and agriculture and water experts.

Since farmers tend to be risk averse, communication should focus on how they can work together collaboratively and pool resources such as by establishing seed banks, communal purchasing of fertiliser and pesticides, improving water management, etc. Information should focus on small, practical steps that are either inexpensive or can be accomplished collectively.

In addition, farmers need information on access to insurance or government schemes. Often, when these services are available, farmers are either not aware of them or do not have enough information on how to benefit.



Specific information needs include information on changing cropping patterns, crop diversification, the correct use of fertilisers and pesticides, coping with less water and soil infertility, new animal husbandry methods and renewable energy

Farmers would also like mobile helplines on weather updates, crop and produce prices, livestock diseases and inoculations. Help centres with information on how to cure diseases in crops and animals, and to provide answers to farmers' questions would be useful.

Reaching this audience

Farmers will be most effectively supported by communication that encourages collective action and provides practical information relating to their needs, including reassurance that they can take action that will help without risking their income. Communication should build on farmers' preference for interactive formats that can inspire them by showcasing communities facing similar impacts, and also include experts to provide technical information. In rural areas, communication programmes should also build on the importance of face-to-face activities.

YOUNG PEOPLE AGED 15–24

Distribution of young people across the five segments

	Surviving	Struggling	Adapting	Willing	Unaffected
All	24 %	10 %	27 %	14 %	26 %
Young people	27 %	7 %	24 %	12 %	30 %

Why a priority?



Warrick Page, Panos

“Things have become worse ... Nowadays there is heat and shortages of electricity, and because of this there is also a water shortage. This is the biggest problem for us.”

(Man, Lahore, rural, age 16–24)



Young people feel a very high level of impact from changes in availability of water, energy and food, as well as from extreme weather events, and are concerned about employment opportunities. The majority are also concerned about health impacts (67%) and their ability to maintain their current lifestyles (65%), while 61% feel that these changes affect their ability to earn. Despite this, they are not the most active group, and more than half fall into either the surviving (finding it too hard to take action) or unaffected (believe there is no need to do anything) segments.

Context

Lack of resources, lack of access to information and lack of government support are the main barriers to response. However, people in this group (45%) are more likely than those in other age groups to think that it is not their responsibility to act and that they have other priorities. Despite feeling its impact, less than a quarter know what the term “climate change” means.

Sources of information

Television remains a favoured media source. Preferred TV formats for this demographic include dramas (64%), news (61%), films (26%) and religious programmes (21%).

“In free time we do housework, stitching, watch TV and even listen to the radio.”

“Also talk on mobile.”

(Women, Goth Dinar Khan, rural, age 16–24)

Mobile phone use is also relatively high, mainly for calling and texting. Internet use in Pakistan is low; only 6% of the survey respondents of this age group used the internet “yesterday or today”.

Information needs

In general, communication for both urban and rural youth, but especially young urban audiences, should build their interest in the issues surrounding climate change. Young people should feel that changes in climate and resources are relevant to their lives – that these changes have an impact on their lifestyles and their future. Specific information needs are listed in the next section.

Reaching this audience

Climate Asia believes that, if better informed and equipped to act, young people can not only be more active in adapting to the changes but also help their families and friends to do so.

There is potential for programmes to focus on engaging this group so that they are less likely to think it is not their responsibility to act. Young people would benefit from both practical information and interactive programmes that allow them to discuss how best to solve the issues they face.

Once attitudes towards these issues have changed and there is a receptive atmosphere, specific information can be shared with this group. Specific information needs for rural youth include information on renewable energy and collective resource management. This group would also benefit from information on insurance against natural disasters and extreme weather events; alternative livelihoods such as handicrafts; information on accessing local markets; renewable energy; new crop and seed varieties; and cultivation methods.

Vocational training centres for young women and men, especially in rural areas, would be popular. Programmes could also focus on increasing young people's awareness of climate change so that they can better understand the implications of the changes they already perceive.

WHAT NEXT?

This report and all Climate Asia data and tools are available on a fully searchable Climate Asia data portal, www.bbc.co.uk/climateasia. We believe that these resources can improve communication and decision-making by allowing stakeholders to better understand their audiences' needs.

The findings of this report can be explored in more detail using the data portal. For instance, responses to any question can be analysed by audience segments, key demographics, geographic location or media use.

SHARING OUR FINDINGS AND TOOLS

We invite people to share this report, the links to the data portal (www.bbc.co.uk/climateasia), the climate change toolkit and our research tools as widely as possible. We will also work with stakeholders and partners to help them use our evidence and analysis. The more people who use our findings and tools, we hope and believe, the greater the chance of effectively supporting people who live with climate change today.

BUILDING ON OUR DATA

This Climate Asia report is just the beginning. Our research can be built on. For instance, people can use Climate Asia research tools to conduct their own surveys. This will enable key indicators to be tracked over time, which would further add to an understanding of the role of communication in climate change adaptation.

By working with existing communication initiatives and new projects, stakeholders can bring this data to life for the people who need it.



APPENDIX: CLIMATE ASIA'S METHODOLOGY

Climate Asia's research has used qualitative and quantitative methods to understand people's perceptions of changes in climate and the environment as well as the impacts of these changes on their lives. The findings will inform adequate communication to support people's needs in responding to these changes.

QUALITATIVE RESEARCH

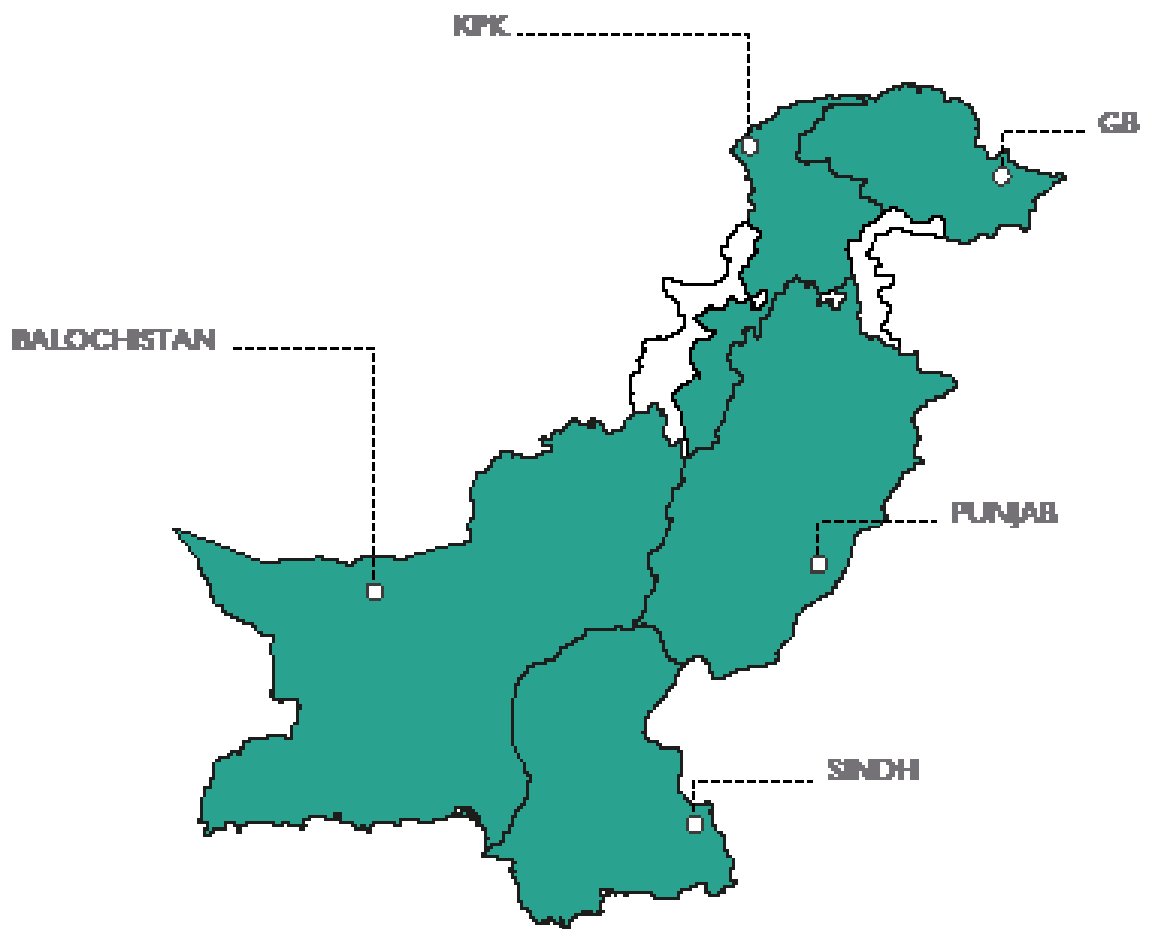
In Pakistan, qualitative research included 17 in-depth interviews with experts and opinion-formers, 16 audience focus groups and five community assessments across the country. The in-depth interviews were conducted with key experts and opinion-formers from central and local government, the media, the private sector, civil society, science and academia. Focus group participants were members of the public from rural and urban areas across the provinces of Sindh, Punjab and KPK. In each location, focus group participants were selected according to age, gender, occupation and social class to capture a diversity of views within the population. The locations for the five community assessments were chosen taking into account the geographical diversity of the country and the diverse climatic impacts. These were Badin (coastal and inland), Karachi (peri-urban), Rajanpur and Layyah.

Initial insights from some of this research and the communication development process, which included workshops and an evaluation of existing initiatives, shaped the approach to quantitative research.



QUANTITATIVE RESEARCH

In Pakistan, the project surveyed 4,128 people following a stratified random sampling approach. First, the sample was divided between rural and urban, according to the proportion of the population. The urban population was divided into three provinces and the rural population into five provinces. Then, a multi-stage sampling approach was followed. In urban areas, four tiers of cities were selected according to population size. Cities were then selected within each tier. Next, circles were selected within each city or town. In rural areas, circles were selected within each province. In both urban and rural areas, circles were treated as the primary sampling unit. Further random methods were followed to choose households, and to choose respondents within each household.





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ACKNOWLEDGEMENTS

BBC Media Action would like to thank everyone who agreed to be interviewed and take part in the Climate Asia research project in Pakistan. All Climate Asia data, including this report, a climate communication guide, information on our research methods and the tools we used to conduct our research are available on www.bbc.co.uk/climateasia.

BBC Media Action is the BBC's international development organisation. The content of this report is the responsibility of BBC Media Action. Any views expressed in this paper should not be taken to represent those of the BBC itself, or of any donors supporting BBC Media Action's work.

This report is part of the Climate Asia project funded by the UK Department for International Development.

This report was compiled and written by Khadija Zaheer and Anna Colom

Series editors: Sonia Whitehead and Damian Wilson

Report and production editor: Diana Shaw

Design by Lono Creative (www.lonocreative.com)

Front cover photo by: Martin Roemers, Panos

The authors thank the following people and organisations for their contribution to the research and writing of this report: Javeria Afzal (Oxfam), Naomi Alesworth-Siddiqui, Sana Baxamoosa, Farida Jamot (Trust for the Conservation of Coastal Resources), Shizza Khan, Hina Lotia (LEAD Pakistan), Fahad Maqbool, Meher Noshirwani (Trust for the Conservation of Coastal Resources), OASIS Insights and Faisal Sherjan (Jang Group).

BBC Media Action is registered in England and Wales under Charity Commission number 1076235 and Company number 3521587.

Registered office: Broadcasting House, Portland Place, London W1A 1AA, United Kingdom

Tel: +44 (0) 20 8008 0001

Fax: +44 (0) 20 8008 5970

Email: media.action@bbc.co.uk

Climate Asia data portal: www.bbc.co.uk/climateasia

BBC Media Action website: www.bbcmediaaction.org

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