# BANGLADESH How the people of Bangladesh live with climate change and what communication can do Md Arif Al Mamun, Naomi Stoll and Sonia Whitehead



# CLIMATE CHANGE IS ABOUT PEOPLE

How do people in Bangladesh 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 3,578 households in Bangladesh. Sixteen focus groups were conducted with men and women from different social backgrounds across seven locations and seven assessments<sup>1</sup> with communities vulnerable to changes in climate were carried out.

In addition to research with the public, 20 key experts and opinion formers from government, civil society, business and academia were interviewed, a workshop was held with experts and opinion formers from media, business and civil society and an evaluation of current and past communications on these subjects was carried out.

Using both quantitative and qualitative research, we have built a nationally representative picture of how different groups of people in Bangladesh live and deal with change. This includes their perception of changes in climate, 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 May to August 2012 across 25 districts in each of Bangladesh's seven divisions, from the char islands and the mangroves of the Sundarbans, to the heart of Dhaka and the beaches of Cox's Bazar. Climate Asia recorded the opinions, insights and needs of this large population, more than 30% of whom live below the poverty line<sup>2</sup>.

More details on the research methodology and sampling followed can be found in the Appendix and at www.bbc.co.uk/climateasia.

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.

<sup>2</sup>World Bank World Development Indicators [online] Available from: http://data.worldbank.org/country/bangladesh [Accessed March 2013]

#### 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?

## BANGLADESHIS HAVE BEEN FEELING THE IMPACT OF CHANGES IN CLIMATE FOR SOME TIME

Bangladesh has historically been affected by cyclones and floods and is at risk from sea level rises. People feel they are experiencing higher temperatures, lower rainfall and less predictable weather than ten years ago, leading to loss of money, livelihood and homes as well as impacts on health. Urban growth, Indian dams, new industry and shrimp farming are seen by people to increase the impact of changes in climate.

Bangladesh is known to many as the adaptation capital of the world. It has welcomed numerous government, civil society and international interventions aimed at helping people cope with changes in climate, a topic covered regularly by the media. The people of Bangladesh are consequently very aware of the term "climate change" and many understand it.

In response, people are changing how they live in Bangladesh, more than in any other country surveyed by Climate Asia. To make more money and provide for the next generation they are supplementing their income with other work, growing alternative crops, migrating and changing jobs.

However, the impact of changes in climate and people's response to these changes vary considerably by division and between larger cities, smaller cities and rural areas. People living in the Southern division of Barisal feel particularly unprepared for extreme weather events while people in Rajshahi in the north are experiencing water shortages and their crops are failing but they are struggling to respond. People living in larger cities like Dhaka and Chittagong feel particularly affected by changes in climate and key resources – water shortages and warmer temperatures that make their work more difficult – but they take the least action.

People feel partly responsible for pollution and environmental changes. They and fellow Bangladeshis have carried out activities such as building factories, which they see as having damaged the environment. This feeling of responsibility motivates people to take action.

#### WHAT THIS MEANS FOR COMMUNICATION

People in Bangladesh are aware of changes in climate and are already starting to act, yet this action needs to be encouraged and built upon. Forty-five per cent of people felt insufficiently informed as to how they could respond. There is a need for communication that encourages response and fosters self-belief. People also want more information on how to take action and develop new skills. There is a role for communication which builds on the strong sense of community in Bangladesh: encouraging discussion to raise awareness of the challenges, building networks of people to share information, and showcasing examples of good practice that inspire people to act.

TV and mobile phones are used regularly by the majority of people, making these good channels of communication; however, face-to-face communication remains very important. Older, educated men who have influence in communities are a particularly good channel for communication as they have higher levels of knowledge about climate change, discuss it more frequently than most and are eager to increase awareness within their community.

#### **HOW TO USE THIS REPORT**

This report presents findings from Bangladesh. It seeks to build a picture of how people live their lives and deal with change, in order to understand their communication needs and help them respond to changes and variations in climate.

Section I details how Bangladeshis live now – it focuses on their values as well as recent positive changes, including increasing development. Increased development has, however, come hand-in-hand with new concerns about the environment, including changes in climate and concerns about access to food, water and energy, which are highlighted in section 2.

In section 3, the report details how people are responding to change, while section 4 includes an analysis of the factors that enable and constrain this response, including the impact people perceive, 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 introduces segments for understanding people's needs in Bangladesh. Analysis of Climate Asia data allowed researchers to segment the people surveyed into groups. These segments help us to understand people's needs, as well as to identify communication opportunities to enable effective action. Section 7 details the communication channels Bangladeshis use now and how to best reach people through the media. Finally, Section 8 builds on all of this information to identify three important priority audiences – fishermen and farmers, people living in larger cities and people living in the division of Barisal – and highlights each audience's specific communication needs.

The report concludes by highlighting how you the reader can use the information, insight and tools generated by the Climate Asia project to communicate with your own target audience.

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## LIFE FOR BANGLADESHIS

This section briefly outlines how people in Bangladesh live, focusing on recent patterns of development and migration as well as the values and beliefs that Bangladeshi people hold.

#### BANGLADESH IS CHANGING

Over the last decade Bangladesh has seen rapid development, a growing economy and substantial improvements in human development indicators, such as life expectancy, health and education. However, the country is still poor; a third of the population live below the poverty line<sup>3</sup> and an estimated 62% of the urban population live in slums<sup>4</sup>. Increasing numbers of people in Bangladesh are moving from rural areas to cities, with the urban population set to rise from just over a quarter of the population to over half by 2050<sup>5</sup>.

#### **URBANISATION: MIGRATION TO THE CITIES**

People living in urban areas tend to be richer and have higher education levels than those in rural areas. For the purpose of this report, cities have been split into two – larger cities with populations of over one million (Dhaka and Chittagong) and smaller cities (such as Mymensingh and Cox's Bazar). People in larger cities tend to be younger, slightly better off, and to have moved to the area more recently. A third of those surveyed in larger cities had moved to the city in the last five years.

75% of the population live in rural areas and have livelihoods based around agriculture, particularly smallhold farming. Farmers tend to be male, although women often have responsibility for work in the home and on the farm.

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



## Three location types, with distinct characteristics - purchasing power, recent migration and age by location

	Total	Larger cities	Smaller cities	Rural
Base	3578	420	448	2710
%	%	%	%	%
% in our sample		12	13	75
Very poor	18	6	8	21
Poor	43	20	34	48
Comfortable	34	70	50	26
Well-off	4	3	7	3
Moved to the area in the last 5 years	10	32	17	5

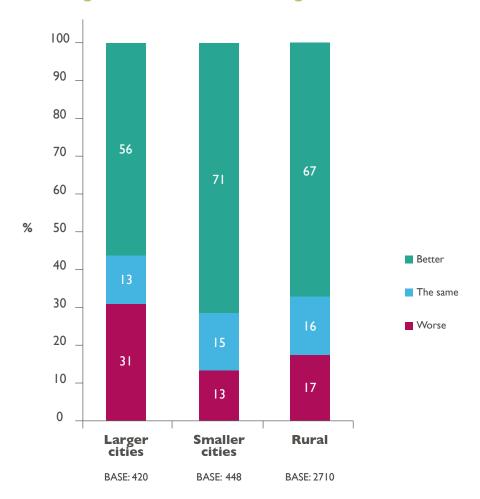
## DEVELOPMENT IS BOTH APPRECIATED AND A CAUSE FOR CONCERN

As a population, most people thought that their lives had improved. However, many still had basic concerns including being most worried about having enough clean water to drink (16%) and not having enough food to eat (15%). Thirty per cent of the very poor were most concerned about not having food, double the population average.

There was a difference in how people viewed development and their lives depending on how urbanised they were.

In larger cities people were less positive about their lives.

#### Differing views on whether life has got better



Q: Compared to 5 years ago, would you say that your life is better, worse or the same now?

Those from rural areas perceived improvement. Many now had access to services such as medical centres, schools and higher education. They also spoke of developments in farming techniques, for instance pesticides and fertilisers, which improved their crop yields.

Respondents from smaller cities had also noticed great improvements in infrastructure, such as housing, electricity, better roads and transport.

People saw upsides and downsides to development. City dwellers spoke of development and urbanisation leading to a lack of trees, overcrowding and water pollution. In rural areas there was concern about how chemicals from farming could cause illness, but also about the impact of urbanisation on the landscape and water availability.



"Once we had nothing, but now those who had nothing have at least a home made of bricks with a TV and furniture."

(Woman, Mymensingh, smaller city, age 35–44)

"The production has increased... although it is because of the insecticides used... the food we eat contains these chemicals and they go into our stomach and create diseases."

(Woman, Rangpur, rural, age 16–24)

## PEOPLE'S VALUES: COMMUNITY, THE ENVIRONMENT AND MONEY

Of all the countries surveyed, people in Bangladesh placed the most importance on being respected in their neighbourhood (81% of respondents said this was very important). Respondents (77%) also felt it was very important to them to fit in with those around them. When asked to choose their most important value, more people selected "Earning as much money as possible" than any other response (36%).

Within the focus groups, participants also placed strong emphasis on the importance of the natural environment. People expressed nostalgia for the green environment that had disappeared with the growth of cities and concern over a decline in the number of trees and animals.

## **CHANGES IN CLIMATE**

People in Bangladesh noticed changes in climate and the availability of food, water and energy. This section focuses on people's perceptions of changes in temperature, rainfall and extreme weather events and the geographic, demographic and developmental factors that determine how changes are felt in their lives.

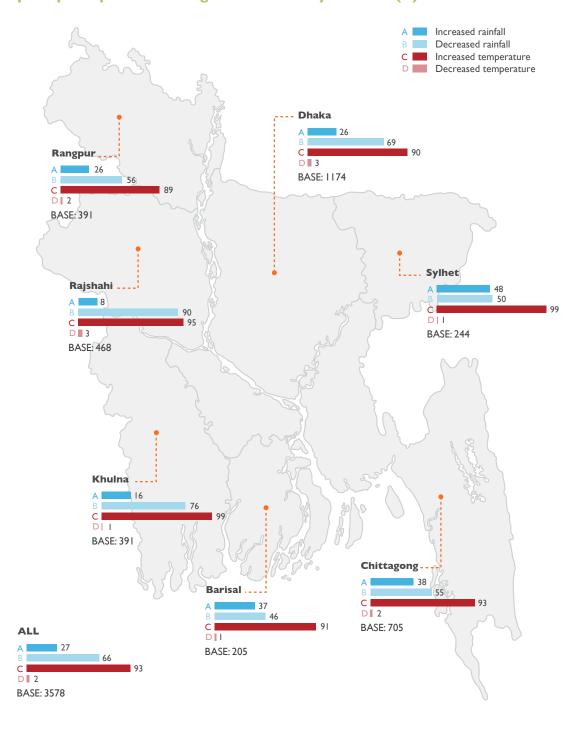
## CONTEXT: BANGLADESH IS VULNERABLE TO CLIMATE CHANGE

Due to its low-lying geography, high population density and poverty levels, Bangladesh has been identified as particularly vulnerable to climate change, in particular to sea-level rise. Barisal and Khulna, on the southern coast, are prone to violent tropical cyclones that raise water levels along the coast and water courses leading to widespread flooding. Increased salinity from flooding and shrimp farming is impacting people's ability to farm, as well as leading to health problems. In northwestern areas, such as Rajshahi, water scarcity has been identified as a key issue, leading, for example, to shortfalls in rice production.

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 perceptions of changes in temperature, rainfall and extreme weather events over a ten-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.

## $\bigcirc 1$

#### People's perception of changes in climate by division (%)



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

Ninety-three per cent of people thought that temperatures had risen. People described temperatures as more extreme, with hotter summers but also colder winters. Seasons were felt to be more unpredictable and short-term weather patterns were harder to predict.

"Now we can hardly feel two seasons. We can feel the summer for nine months and the other three months are winter."

(Man, Mymensingh, smaller city, age 25–34)

# PERCEIVED CHANGES IN CLIMATE DIFFER ACROSS THE COUNTRY AND DEVELOPMENT AFFECTS THEIR IMPACT

Bangladeshis across the country perceived different changes in climate. People in the Rajshahi division, in the north west of the country, felt rainfall had decreased more than in any other division. Local factors also played a role in determining how changes had an impact on their lives. People and experts felt the effects of these changes were exacerbated by the Farakka Dam in India, which had reduced the amount of water in the Padma river running through Rajshahi. Consequently people in this division had noticed larger decreases in water availability than any other.

"For Bangladesh, I think, the most important thing is the Farakka Dam. It is a deadly trap for Bangladesh. All these problems of Bangladesh, most of them are caused by this dam."

(In-depth interview, government representative)



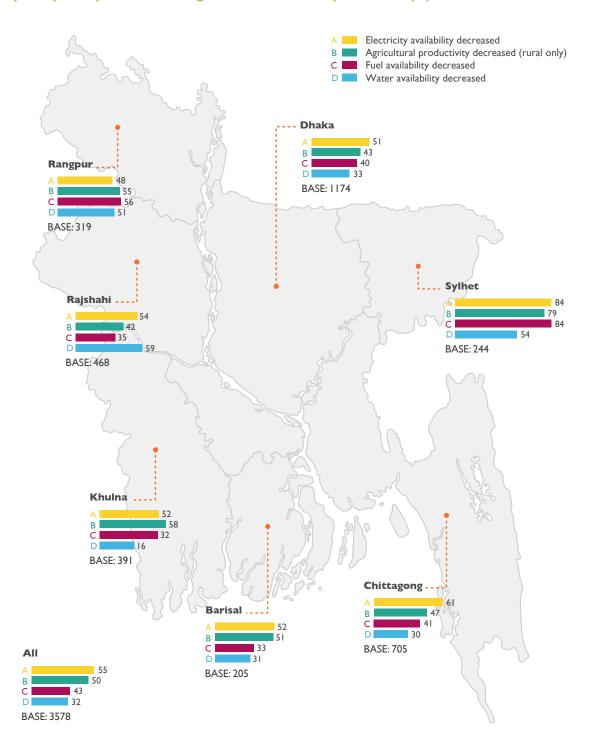
Sylhet, in the north east, was the division in which people felt the most impact from changes in resources, feeling that water, agricultural productivity, electricity and fuel availability had all substantially decreased. The southern division of Barisal, which is historically vulnerable to cyclones, also felt particularly at risk of extreme weather events, with 71% feeling at high risk, compared with an average of 33%.

Experts and opinion formers emphasised the importance of paying attention to divisional differences when considering what should be communicated in different parts of the country and how this should be framed. One government representative suggested, for instance, that in the north east, the traditional songs and dances of that area should be used in communication.

"Each area has its own problems. Our region has its own needs. The problems of the northern region and the southern region are not the same and their solutions are not the same."

(In-depth interview, government representative)

#### People's perception of changes in resources by division (%)



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



#### WATER SHORTAGES

People in a northwestern village are angry. They feel that the water in their area is being taken by the coal mine that was built next to the village. Water is already scarce because there has been less rain in the last few years and dams built in India have reduced the flow of the rivers into the area. They think the coal mine has made things worse.

People don't have enough water to irrigate their crops and have difficulty finding drinking water. Villagers who cannot afford deep tube wells now have to walk for hours to collect water because the ponds and wells they used have dried up. They tried to switch crops from rice to wheat, but this wasn't profitable so they switched back. Some have left farming altogether and have gone to work in the nearby rice mills.

Lack of water has wider social impacts. Men are finding it hard to find wives who want to move to a village with no water, and all the young women are marrying outside the village to ensure they have a life where water is available.

## POPULATION GROWTH MAKES THINGS HARDER IN URBAN AREAS

People living in larger cities felt rainfall had decreased, extreme weather events were more frequent and that it had become hotter. When describing temperature increases, people in larger cities spoke about it by referring to the impact the heat had on their day-to-day tasks and the bad smells from contaminated waterways. They also thought that the environment around them had changed dramatically, with 86% of people in larger cities feeling the number of trees had decreased compared with 55% nationally.

"Many people have come to Dhaka from Barisal because of river erosion. They used to be engaged in agriculture and farming. But they have to live their life. What else could they do? They came here... it is creating big pressure now."

(Man, Dhaka, larger city, age 45+)

A decrease in water availability was felt in larger cities where people were most worried by water availability and having suitable shelter. This reflects the increasing strain on infrastructure and resources in these growing metropolitan areas<sup>6</sup>. In the Korail slum in Dhaka people were concerned about getting sufficient clean drinking water and in response were illegally accessing the water supply through an intermediary.

<sup>&</sup>lt;sup>6</sup>Although Climate Asia did not interview slum dwellers as part of the survey, accessing clean water is a well-documented problem for those in slum areas where water is often not accessed directly through the water boards but illegally through intermediaries. This can lead to unsanitary piping of water through slums and unreliable supply (http://archive.thedailystar.net/newDesign/news-details.php?nid=270642).

One of the main reasons people gave for these difficulties was population growth. The majority of people felt this was a cause of a change in resources (66%) and environment (58%). This is higher in Bangladesh than in any of the other six countries surveyed. The growing population was often linked to increasing rural-urban migration, which was putting pressure on the cities' resources.

## PEOPLE THINK CORRUPTION MAKES THINGS WORSE

In Bangladesh, corruption was also blamed for causing changes in the environment (24%) as well as changes in water, food and energy (34%). Corruption was seen to prompt unethical actions, such as cutting down trees, as well as allowing people to break the law and carry out harmful acts like river dredging.

"They have been cutting on the hills and constantly bribing the officials... The government hasn't done anything about it... Nothing is working at this moment... Everything is corrupted..."

(Woman, Cox's Bazar, smaller city, age 45+)

## THE GOVERNMENT, NGOS AND MEDIA USE COMMUNICATION TO AID RESPONSE

The government of Bangladesh has been heavily involved in addressing climate change. Government representatives interviewed by Climate Asia cited a range of policies that focus on helping people adapt to change, respond to disasters and develop in a sustainable way. They placed particular emphasis on the National Adaptation Programme of Action (NAPA) and the Bangladesh Climate Change Strategy and Action Plan. One representative felt there should be more communication through media to raise public awareness; however, they were unsure whom this information should be targeted at and what the best medium was for reaching people.

# 02

National and international non-governmental (NGOs) organisations were also very active, particularly in rural areas. They tended to provide practical information to vulnerable communities to improve their ability to respond to shocks and stresses. NGOs often used face-to-face communications to support people. These included workshops, seminars and participatory activities, and they often supported these activities with booklets, leaflets and brochures. In a few cases NGOs used media as part of their projects; for example, one organisation had developed content for community radio.

The evaluation of existing communication initiatives showed that climate change was often discussed in the news, especially in the aftermath of a natural disaster, as well as in agricultural and environmentally-focused programmes on TV and radio.

Less common was communication focused on helping people adapt to change. Examples included an agricultural programme, *Hridoye Mati O Manush* (People of the Land) on Channel i, which has discussions about the climatic impact on crops and agriculture, and the Green Hour on Radio Today, which covers environmental issues.

"If you ask me about development of NGO work and the whole development sector over the last 40 years then I should mention the awareness which has been built among the common people."

(In-depth interview, thematic expert)

#### AWARENESS OF CLIMATE CHANGE IS HIGH

Interventions by the government, NGOs and media have helped create a high level of awareness of the term climate change – over eight in 10 people had heard of the term and six in 10 people knew what it meant. This was the second-highest result in the region, after China. Awareness of climate change or global warming was highest among the more educated.

More than three-quarters (77%) of people felt that climate change was happening. Those who believed climate change was happening mentioned population growth (78%), loss of trees (74%), human activity leading to greenhouse gas emissions (41%) and migration into cities (40%) as the main causes.

A proportion of people (16–17%) spontaneously blamed climate change or global warming for changes in the availability of food, water and energy they were experiencing. This figure was substantially higher than for any other country.

"Climate change is grabbing us like an octopus from every direction. The common people understand that climate change is the reason for their suffering... And they are trying to understand the reasons for this change."

(In-depth interview, government representative)

#### Spontaneous use of the term climate change

Country	Bangladesh	China	India	Indonesia	Nepal	Pakistan	Vietnam
Base	3578	5062	8368	4985	2354	4128	3486
% who spontaneously used the word climate change to explain changes in water, food and energy availability	17	I	3	0	2	0	I

Q: What in your view are the causes (of changes in water, food and energy availability)?



## **IMPACTS AND RESPONSES**

People described the impact of changes in climate and the availability of key resources in their lives. This section describes these impacts and people's responses to them in more detail.

People find it difficult to distinguish between impacts associated with the availability of key resources – food, water, energy – from 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."

#### THE IMPACT OF CHANGE

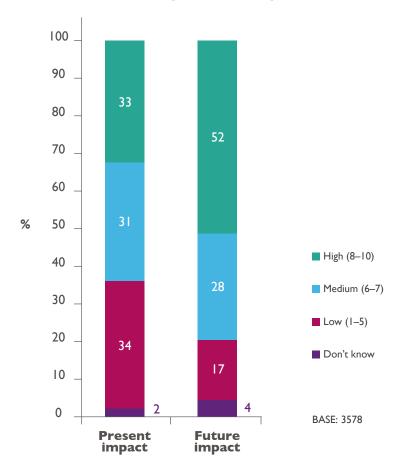
Climate Asia asked a series of unprompted questions about how people were responding in their day-to-day lives to changes they were noticing in climate and availability of key resources. This was followed by a series of prompted questions about specific actions they could take in response to changes 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.

A third of Bangladeshis felt they had experienced a high level of impact on their lives as a result of changes in food, water, energy and climate. Most people felt the impact of these changes would increase in future.

"One of the great problems of climate change is that people are losing their livelihood... Like a man who used to farm, he cannot farm now. And he is not getting another job."

(Community assessment, Khulna)

#### Present and future perceived impact



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? (On a scale of 1 to 10)

#### **Money matters**

Over 80% of the population felt that the changes in the weather and resources were impacting their ability to earn money. Over half of these people felt this impact very strongly.

Those who were well-off were somewhat protected from the impacts of change. Just under a quarter of people in this income category felt a high level of impact compared with around a third of people in other income categories.

#### People are feeling impacts on their health

When asked about how changes in weather and resources were affecting them, 86% of people said it was affecting their ability to stay healthy. Temperature extremes and flooding were seen to contribute to an increase in fevers, diarrhoea and water-borne diseases such as dengue fever. One reason given was that there was little clean water available for people to drink, particularly during floods. In one community in Barisal people also felt that increased salination caused skin rashes.



"Our children have to suffer from many diseases like fever, catching cold, diarrhoea, dysentery due to climate change"

(Man, Mymensigh, smaller city, age 25–34)

## BANGLADESH HAS A HISTORY OF DEALING WITH SIMILAR PROBLEMS AND IS TAKING ACTION

Bangladesh has a long history of responding to natural variations in climate, which may mean the country is better prepared than some to cope with the impact of changes in climate. As one media expert pointed out:

"The effect of cyclone Sidr or Aila was less than hurricane Katrina or cyclone Nargis, which hit Myanmar, probably because people in Bangladesh are more used to facing these kinds of natural calamity and also probably because our coping capacity has increased."

(In-depth interview, media expert)

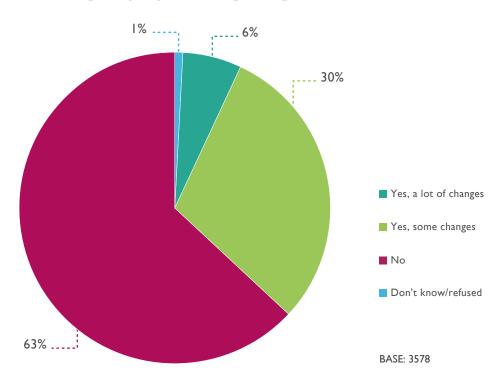
Bangladeshis were responding to these changes at a very high rate. Changes included supplementing their income (65%), growing alternative crops (27%), migrating (18%) and changing job (18%).

36% of Bangladeshis had made changes to their livelihoods, the highest proportion of all countries in the Climate Asia study.

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.

#### Percentage of people making changes to their livelihood



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?

There was also a strong appetite for further changes in future. Seventy-eight per cent of those who had made changes saw the need to make more changes; among those who weren't making changes, 52% felt they should. In addition, 45% of people said they were making changes to their lifestyle, the highest proportion of people in the seven countries surveyed by Climate Asia. They were taking a range of actions including making water safe to drink, using electricity more efficiently, storing water and changing their diet.

## SHRIMP FARMING: THE BENEFITS AND DISADVANTAGES

In several communities visited for Climate Asia, people had switched from wheat or rice farming to shrimp farming. This had a positive impact for some, as shrimp farming is more profitable. However, some people felt the change to shrimp farming had increased the impact of changes in climate. They felt that cyclones had become stronger and that shrimp farms were retaining more salt water, particularly after cyclones. This made the land salty, making it difficult to find fresh drinking water. Some people profited from shrimp farming while subsistence farmers could no longer graze their livestock and had trouble growing crops in saltier soil. These people had become poorer and some, particularly the young, had left the village. People also felt that the salinity had led to illnesses such as fever, chicken pox, diarrhoea and eye inflammation.



## AGRICULTURE: A LINK BETWEEN WEATHER AND RURAL LIVELIHOODS

Changes in weather were seen to be affecting people's incomes by making agricultural production more difficult and expensive. The following chart outlines the multiple ways in which this happens:

#### How changes in weather can affect people's livelihoods

#### **Expenditure increases**

as changes in weather force higher spending on cultivation:

Hot temperatures and drought force them to use more expensive fertilisers, irrigation in the summer and, in some cases, drought resistant seeds.

#### **Incomes decrease**

as changes in weather destroy crops:

- · Lack of rain causes crops to die
  - · Hail crushes crops
- · Rain falling at unpredictable times means crops don't ripen
  - Unpredictable rainfall ruins crops just before harvest
- · Colder weather creates heavy dew in the morning, which ruins the crop
  - · Increased salination of soil killing crops and fruit trees

#### **Expenditure increases**

again because people have to buy more food: "The coconut trees were at every house... now if someone wants to eat a coconut, they need to buy it from market." (Community assessment, Khulna)

#### **Decrease in food production**

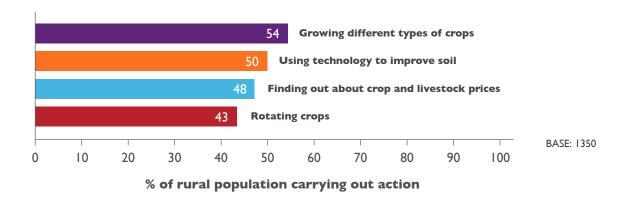
means people are more vulnerable to price hikes as they are reliant on bought food:

"Price hiking is affecting us very much...potatoes were 8 tk per kg are now 24 tk per kg! ... If all of our income has to be spent on food then how can we manage the other things like medicine and education for the children?" (Woman, Mymensingh, smaller city, age 35–44)

Half the rural population felt that agricultural productivity had decreased, while only a quarter felt it had increased. To counter decreases in agricultural productivity, 35% of people in rural areas were making changes to their livelihoods. Of those, over half were supplementing their income in other ways and nearly a third of people were growing alternative crops.

People were also carrying out specific actions related to agriculture.

#### Agricultural actions people were carrying out



Q: Which of these actions are you currently doing?

For some people, carrying out these actions was not seen as a response to changes, but as something they were doing to improve crop yields:

"Due to improved technology I think the condition of the environment is better than 10 years ago. Then I saw many crops that were spoiled just because of lack of water. But now that situation has improved."

(Man, Rangpur, rural, age 35–44)



#### **AVAILABILITY OF WATER IS A KEY ISSUE**

Over a third of the population felt access to water had decreased. Water shortages were seen in some areas to be due to changes in climate and in other areas urbanisation and the growth of industry were seen to have made the problem worse. However, some people were taking action to respond to the problem.

#### Water-related actions people were carrying out

	All	Larger cities	Smaller cities	Rural
Base	1790	207	223	1360
%	%	%	%	%
Making water safe to drink	48	89	50	41
Finding a new water supply	45	28	44	48
Storing/saving water	29	26	31	29
Recycling water	10	12	7	11

Q: Which of these actions are you currently doing?

In Rajshahi, where people were suffering from drought, fewer people than in other divisions were taking action to deal with shortages of water.

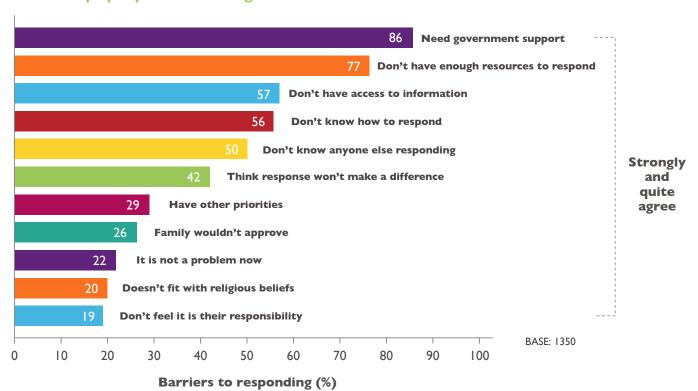
# ENABLERS AND BARRIERS TO ACTION

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.

## LACK OF GOVERNMENT SUPPORT WAS THE MAIN BARRIER TO RESPONSE

Lack of government support was seen to be the main barrier to responding to changes. This was followed by not having enough resources to respond and not having enough information.

#### What stops people from taking action?



Q: For each statement I read out, please say whether you agree or disagree with it as a reason for why you would not respond (% of people who strongly and quite agree is shown).

## 04

People saw the government as responsible for providing infrastructural support – building dams, installing tube wells – as well as providing money to help buy equipment and providing information on new crops, farming methods or livelihoods.

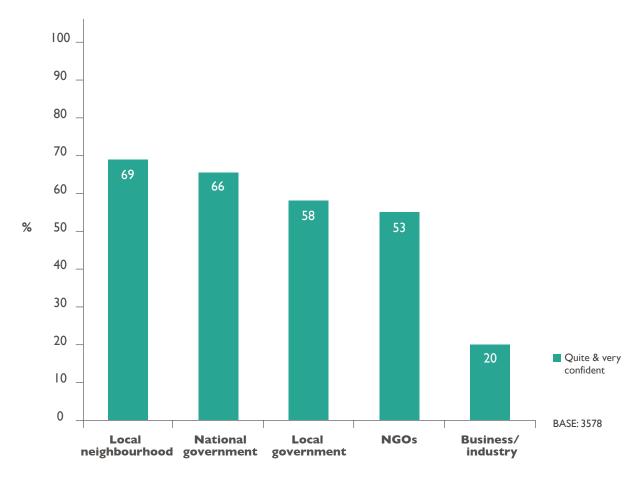
People trusted the national government (66%) more than local government (58%) to take the necessary action to respond to the changes in weather and resources. Despite this high level of confidence, only a quarter of people felt that the government listened to them.

Government officials felt that the government had worked hard and implemented a large number of initiatives. However, one official highlighted the need for the public to demand a response from the government:

"The government cannot do it alone. The common people must raise their voice. Then the government will understand that they have to do something about it."

(In-depth interview, government representative)

#### There is most confidence in the local neighbourhood



Q: How confident do you feel that each of the following institutions are taking the necessary actions to help respond to changes in water, food, energy supplies or weather?

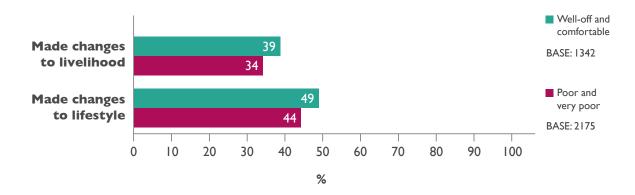
Bangladeshis mentioned wanting to be healthy and able to ensure a better future for their children as their main drivers to response (83% strongly stating this).

Other drivers included needing to survive (59%), caring for the environment (57%) and saving money (57%).

## PEOPLE WITH HIGHER PURCHASING POWER WERE MAKING MORE CHANGES

Not having enough resources was the second most commonly stated barrier to taking action. People with more money were also more likely to respond by making livelihood and lifestyle changes. They were also more likely to prepare for extreme weather, such as signing up to early warning alerts and listening to weather forecasts.

#### Relationship between resources and responses

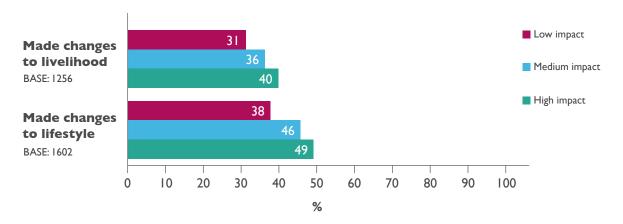




# THE MORE IMPACT PEOPLE FELT, THE MORE LIKELY PEOPLE WERE TO RESPOND EXCEPT IN LARGER CITIES

Overall, those who felt a high impact were slightly more likely to make changes to their livelihood and lifestyles.

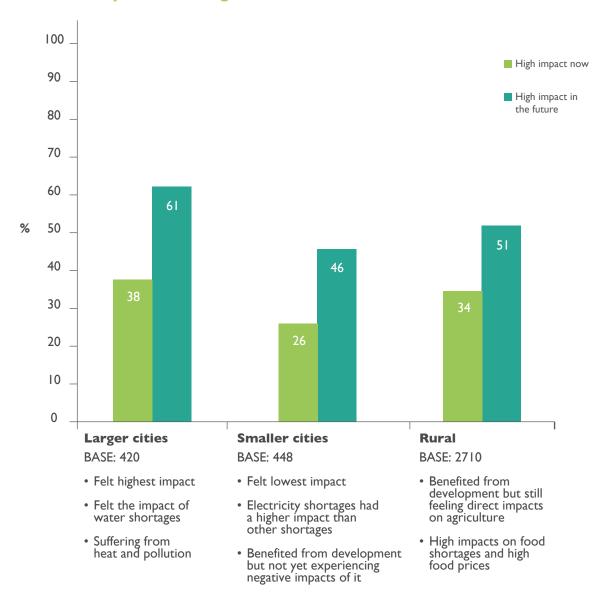
#### People who felt a higher level of impact were more likely to respond



Q: Have you, or your family, made changes to your current livelihood/job/current lifestyle/way of living to help cope/deal with changes in water, food, energy supplies or weather you might be facing (either now or in the future)?

People in rural and smaller cities were much more likely to respond if they felt a high level of impact, while people in larger cities although feeling impact, were struggling to respond. They were also taking the smallest number of actions to adapt. People living in larger cities were much more likely to have migrated or changed job than those in smaller cities or rural areas.

#### Different impacts are being felt in different areas

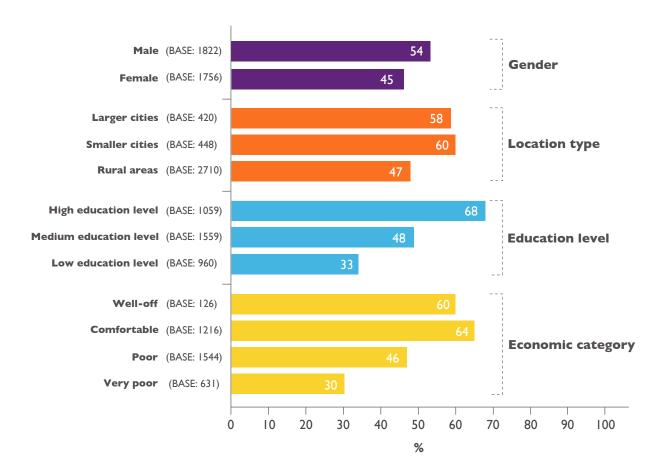




## INFORMATION IS CRITICAL IN HELPING PEOPLE RESPOND

Information was seen to be helping people to respond. Overall, 49% felt informed about how to respond. These people were more likely to feel prepared for extreme weather events (67%) compared with those who were not informed (38%) and to take action to do so. For instance they were making adjustments to their home, forming disaster preparedness plans and signing up to early warning alerts.

#### Who felt informed?



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

Men tended to feel more informed than women. Those in urban areas felt more informed than those in rural areas. Better educated, wealthier people were more likely to feel informed about how to respond to change.

Unfortunately, despite intervention from government, NGOs and media, 46% of the population did not feel informed about how to respond to these changes and 57% mentioned not having enough access to information as a barrier to response. Only 22% had been exposed to communication that dealt with the impacts of changes in climate and resource availability.

Discussion with peers was another important source of information. Discussion about changes in weather and resources was relatively high in Bangladesh, with half of those interviewed saying they discussed these issues often. This was also particularly important in helping people prepare for disasters. Those who discussed the issues more felt more prepared (64%) than those not discussing the issues (40%).

"If all of a sudden we hear that there is going to be a cyclone tomorrow the first thing that will come to my mind is I have to protect myself and my family and others... I will plan to have a group discussion with others to take necessary steps... I don't know how to face the cyclones..."

(Man, Khulna, smaller city, age 16-24)

#### COMMUNITY BONDS AID RESPONSE

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

In Bangladesh, many communities worked together to solve problems. Fifty-eight per cent of people felt involved in local decision-making, the highest percentage of all countries, and over 80% felt the neighbourhood worked together to solve problems. However, men were more likely to feel involved in their communities than women. Communities that were working together were more likely to be taking action to respond to change.

## USING THESE FINDINGS TO CREATE A DEEPER UNDERSTANDING OF PEOPLE'S NEEDS

An understanding of people's perceptions of barriers and enablers to response is essential to ensure communication meets people's needs. With this in mind, Climate Asia has segmented people across the seven countries based on the impact they feel, how they are responding, the degree to which they feel connected with their community, their key barriers to action, including a perceived lack of information, and their willingness to make changes. Further details about the composition of these segments in Bangladesh and their implications for communications can be found in section 6.

## COMMUNICATION: ENABLING ACTION NOW AND IN THE FUTURE

This section draws on the findings of Climate Asia's research to demonstrate how media and communication can be used to help people respond to change across Bangladesh.

Media and communication have real potential to support people to reduce the impact of changes in weather 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

#### **People**

Drawing on the findings of Climate Asia research, media and communication can play a role in Bangladesh by:

**Encouraging a belief that people can do something.** "Not knowing how to" and "not thinking it will make a difference" were identified as barriers to response. For some, their religious beliefs led them to take a fatalistic approach. Increasing their confidence in being able to act and fostering the belief that the things they do will make a difference to their everyday lives can influence change.

**Building on a motivation to take action.** People in Bangladesh have a strong sense of responsibility to protect their natural environment and many want, as well as need, to take action. This should be taken into account by those looking to communicate with people in Bangladesh and can be used to frame this communication.

**Informing people.** Media are generally a trusted source of information on this issue. There is a real opportunity to reach more people with information about ways of responding to the issues they are facing and the effects they feel. Media can also build on and amplify the work of other actors, including government and NGOs.

#### **Community**

Bangladeshis value their families and communities and most feel that they act together to solve problems. This can be used to encourage people to take action and to increase its effectiveness.

**Creating social acceptance and support.** Fitting in is a very strong value among Bangladeshis and if they see others taking action, it is likely to inspire them. Communication can play a role in shifting perceptions of what is possible by showing people taking action from around the country and encouraging communities to work together.

**Discussion with others.** Increasing engagement in these issues by facilitating discussion among communities is crucial in enabling response. This is particularly true for issues such as preparing for disasters, where it is important to work together, and improving agricultural productivity, where solutions often need to be tailored to the local area. Therefore, it is important to encourage people not to deal with this issue alone, but to try to solve problems as a community.

**Reaching influential community members.** There is high value attached to social position in the community. Older, well-educated men, among them imams, are respected and influential. Communicating with these people is likely to ensure that information is accepted and disseminated. They are also an effective channel for information to reach the community.

#### Institutions

A key barrier to action for many is the lack of support from institutions. Media can be used to create dialogue between these institutions and people.

**Hold government to account.** There is scope for better dialogue between the general public and government on this issue. People did not feel that the government listened to them and government representatives themselves mentioned that if more demand was created from the voting population then they might act more. Communication can support this dialogue between the general public and governments and provide a space for institutions to be held accountable.

**Help civil society meet people's needs.** Trust in NGOs and the extent to which they were perceived to be effective varied considerably. In some of the communities visited, people gave examples of where NGO interventions had failed because they didn't understand the people or their situation. One community gave the example of an NGO that had given people livestock in an area where there was no grazing land. There are opportunities to increase the effectiveness of NGO initiatives through communication based on a better understanding of community needs and motivations to act.

# BRINGING IMPACTS AND ACTION TOGETHER TO UNDERSTAND PEOPLE IN BANGLADESH

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 better understanding of people's needs in Bangladesh. These insights can then be used to identify opportunities for communication that encourages effective action in response to changes in climate.

People in Bangladesh 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.

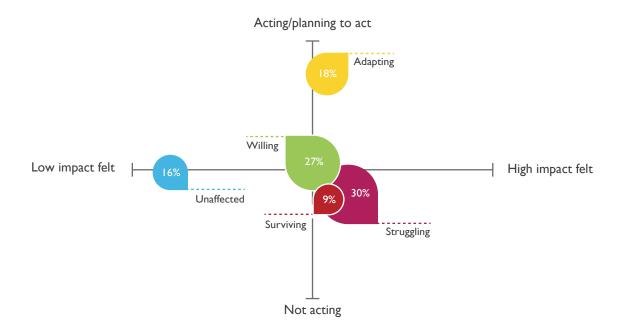
Section 3 highlighted how people in Bangladesh respond differently to the changes they face for a variety of reasons including:

- Their access to information
- The degree to which they feel connected with their community
- Their financial resources
- Their personal beliefs

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.

#### People in Bangladesh are taking action



- 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"

More detail on how these audience segments were formed can be found at www.bbc.co.uk/climateasia.

#### SEGMENTS BY DEMOGRAPHICS

The breakdown of the segments by key demographics shows that people feeling the most impact and not responding as much, the surviving and struggling, are more likely to be poor or very poor. People in larger cities, who recently migrated to the area, or in Rajshahi, where people are feeling decreases in water availability, are more likely to be in the surviving segment and are classed as feeling the impacts of changes in climate but not taking much action to respond. These groups have not had as much time to adapt to their new environment as people who are living in areas such as Barisal where there are high numbers of people in the struggling segment, who have experienced salination and floods for a long time, but have more idea of how to respond – even if they have not been successful in doing so.

### The breakdown of Climate Asia segments

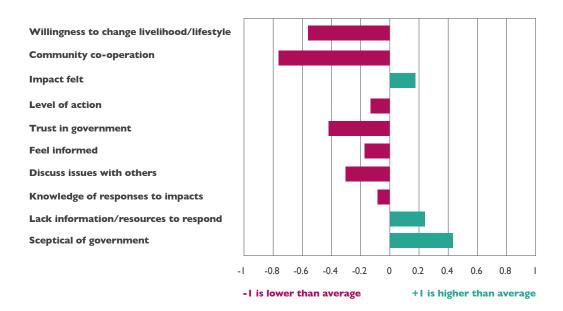
	Total	Surviving	Struggling	Adapting	Willing	Unaffected
Base	3578	276	939	566	819	478
%	%	%	%	%	%	%
Gender						
Male	51	40	58	55	57	44
Female	49	60	42	45	43	56
Economic category						
Very poor	18	15	22	14	14	17
Poor	43	45	47	41	42	44
Comfortable	34	33	28	42	39	30
Well-off	4	6	2	2	4	5
Occupation						
Farmers	12	11	17	10	11	9
Housewives	42	53	36	40	35	50
Unskilled workers	4	4	5	4	3	5
Region						
Dhaka	33	37	29	58	26	20
Chittagong	20	24	22	14	23	8
Sylhet	7	3	14	7	6	I
Barisal	6	2	П	5	5	0
Rajshahi	13	24	П	4	10	29
Rangpur	11	8	6	6	7	31
Khulna	11	2	8	6	22	10
Location						
Larger cities	12	17	10	15	13	9
Smaller cities	37	32	34	25	45	44
Rural areas	52	50	56	60	41	47

## SURVIVING (9%): FINDING IT TOO HARD TO TAKE ACTION

- 58% do not feel their actions can make a difference
- 63% do not feel informed about what they can do
- 49% feel that their family would not approve of making changes

People in the surviving segment are feeling the impacts of changes in climate, but are unwilling to take action. They feel isolated and helpless and are not discussing the issues as much as other segments. They do not feel integrated into their community and feel that people close to them would not approve if they took action. Knowledge of how to take action is low and they do not feel informed. Confidence in the government to respond is also low.

#### 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. +I is higher than average and -I is lower than average.

#### Aims for communication

**Increase awareness of the problem.** People need to be encouraged to act. To do this, people need to be informed about the long-term impacts on their lives and ways that they can adapt their lifestyle to combat these issues. For example, communication could show that water availability will continue to decrease and that people can take actions, such as saving rainwater, to help them combat this decrease.

**Encourage social acceptance.** A key barrier for this group is that they don't feel their families would approve of them taking action. Media can showcase how this is a common problem and that communities – including both men and women – should be working together to respond to change.

**Increase self-belief and confidence that they can act.** As a large proportion of this segment are housewives, using media to showcase women who are taking successful action would be most effective in inspiring people to act.

**Improve knowledge of simple actions.** Showing how people can take small actions in the household, such as recycling water or preserving food, will help them to feel they can be successful.

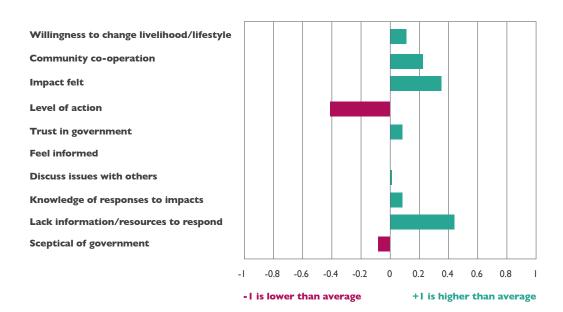
**Increase engagement with the issue.** Encourage people to discuss the problems they face more and work together more as a community.

## STRUGGLING (30%): TRYING TO TAKE ACTION BUT FINDING IT VERY DIFFICULT

- 43% are most worried about not having enough clean water to drink or food to eat
- 55% feel that agricultural productivity has decreased
- 67% feel strongly that they need to act in order to survive
- 90% feel they do not have enough finances and equipment to make changes

They feel they can make decisions as a community and value fitting in. While they feel the impacts and want to act, they are finding it difficult to do things in practice. They are taking some action, for instance in rural areas, by growing different crops and improving soil fertility. They are struggling to carry out other actions because of lack of financial resources or information.

#### Struggling vs the rest of the population



#### Aims for communication

**Build networks.** People feel connected to the community. This ethos can be harnessed by facilitating dialogue between communities so that ideas can be shared and issues discussed.

**Inform.** Provide practical, relevant information. This information should be rooted in the impacts that people feel; for example, simple steps to help them cope with an increase in waterborne diseases.

**Inspire.** This group needs to feel they are able to take action. Media could showcase people who are struggling, but have found innovative ways to cope and have worked with their community to pool resources. Seeing others like them responding would reassure them that other communities already use these approaches and that they work.

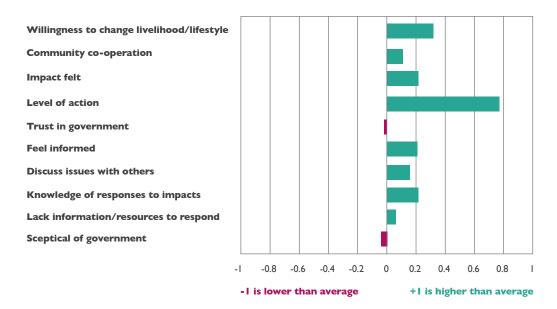
**Increase accountability.** Facilitate dialogue between government bodies, other organisations and people, to hear and respond to demands for infrastructure and resources.

## ADAPTING (18%): ACTING AND WANTING TO DO MORE

- 82% have found a new water supply
- 58% have made changes to their livelihoods
- 80% feel that guilt motivated them to act
- 70% feel helpless about how to deal with changes in weather

People in the adapting segment take more action than those in any other group. They feel more informed than most, frequently talk to peers and have extensive understanding of climate change and its causes. This segment feels more informed than most and frequently talks to peers. They have extensive understanding of climate change and its causes. Guilt is helping to drive this group to act; they care about the environment and feel that they need to take responsibility for changes that are occurring. However, they still feel they need to do more but are hampered by the lack of resources available to them.

#### Adapting vs the rest of the population



#### Aims for communication

**Help to facilitate discussion.** These people hold a strong position in their community. They discuss issues with their community, but there is scope to increase this. Therefore, encouraging them to lead community discussions and work together to solve problems could work well.

**Share their experiences to inspire others.** People in the adapting segment are undertaking a wide range of actions to cope with change. It's likely that many innovations will be invented, trialled and tested by this group. Encouraging and enabling those who are adapting to share their experience with others will give others the change to learn from them and inspire them to act.

**Provide more technical information.** This group still feels ill-equipped to deal with the challenges it faces. People want information on how to respond, particularly more sophisticated responses that may involve working with a community.

**Increase skills.** This group is eager to make more changes and to improve skills, for instance, by learning new agricultural and fishing techniques or by installing renewable energy. As an influential group, it would also be a good conduit through which to share skills with others in the community.

**Increase accountability.** This group has a role to play in pressuring government bodies to help people respond by sharing their experience and discussing the need for more infrastructure and complex responses.

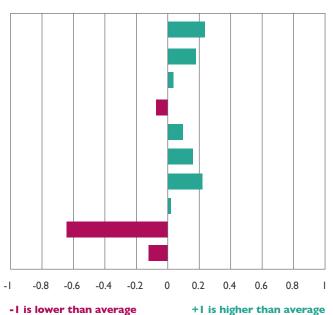
### **WILLING (27%): WORRYING ABOUT TOMORROW**

- 88% are aware of the term climate change
- 79% feel the media cover these issues well
- 93% feel impacts on their health

People in this segment feel the impacts of changes in climate, particularly on their ability to earn money and stay healthy. They are taking action to respond, but not as much as the adapting segment. Awareness of climate change is high and they understand the future impacts these changes will have on people. Unlike other segments, they feel they have access to enough money and information as well as having a responsibility to act. They are motivated by what they feel are the changes in climate and how this is affecting their health and ability to earn money. "Fitting in" with others and being respected is also important to them.

#### Willing vs the rest of the population

Willingness to change livelihood/lifestyle
Community co-operation
Impact felt
Level of action
Trust in government
Feel informed
Discuss issues with others
Knowledge of responses to impacts
Lack information/resources to respond
Sceptical of government



#### Aims for communication

**Encourage working together.** This segment has more resources at its disposal and is willing to make changes. Nonetheless, they are not front-runners in adapting to climate change. Encouraging them to work together with their communities may prompt them to take further action to support themselves and others, given their concern about "fitting in".

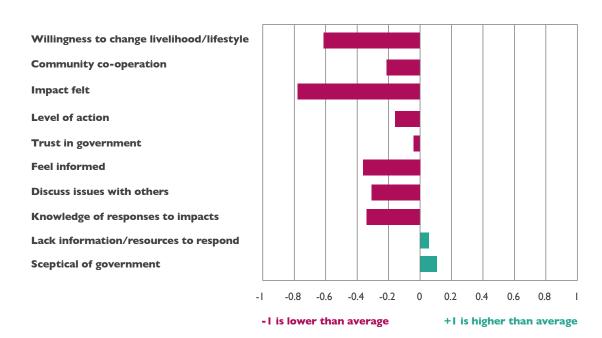
**Show them how to act.** This group has a good understanding of the term climate change, but information on how they could be more resilient to the long-term impacts would help to convince them to take practical action now, to help them in the future.

#### UNAFFECTED (16%): BELIEVE THERE IS NO NEED TO DO ANYTHING

- 72% don't want to change their livelihoods
- 47% feel they have other priorities
- 38% do not feel it is their responsibility to respond to the changes
- 45% understand the term "climate change" lower than all other segments

The unaffected face two main hurdles: they do not feel they have the resources to act and they lack interest in the subject. Adapting to the impacts felt is not a priority for them. Their knowledge of how to respond is low and they do not feel well informed. They differ from the surviving segment in that they don't feel the impact of these changes in climate on their lives now. The unaffected believe it is important to fit in and earning money is an important incentive for them to act.

#### Unaffected vs the rest of the population



#### Aims for communication

**Increase awareness of current and future impacts.** This group has less understanding of climate change than other segments. Communications should focus on building awareness of the potential future impacts on their lives and stress the potentially positive impact of adapting to the changes on their ability to earn money and stay healthy.

**Increase engagement in issues.** By encouraging discussion about these issues and inspiring response by showing what others do, this group can feel more connected to this issue and feel that they can take action.

**Build knowledge.** Simple steps on how to adapt both individually and as a community, without requiring too many resources, will help to motivate this group to take more action.

# THE MEDIA AND COMMUNICATION LANDSCAPE OF BANGLADESH

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 new figures on media and communication use in Bangladesh.

#### **RECENT MEDIA USE**

#### Media usage (used "yesterday or today")

	All	Male	Female	Larger cities	Smaller cities	Rural	Well-off	Comfortable	Poor	Very poor
Base	3578	1822	1756	420	1307	1851	126	1216	1544	631
%	%	%	%	%	%	%	%	%	%	%
TV	80	82	77	97	93	75	83	94	77	56
Radio	7	7	6	10	10	6	12	8	6	6
Mobile	86	89	83	93	89	85	86	93	87	71

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

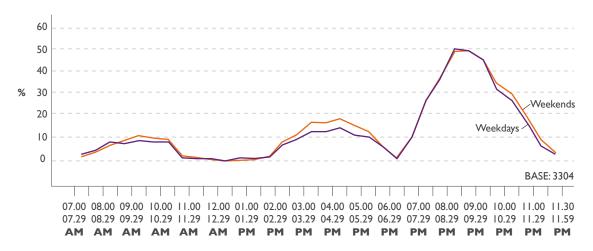
#### TV

TV was found to be the most popular medium. People tended to watch TV in the afternoon and evening, when they had finished work or, for many women, after cooking the evening meal. The state channel, BTV, had the highest viewing figures and was most popular in rural areas where it is the only channel for people without access to cable and satellite TV broadcasts.

Women said they liked to watch soaps and dramas on channels like the Indian Bengali channel Star Jalsha, while men preferred sports and news and watched ATN Bangla and ATN news. There was a strong community element

to watching TV. Nearly a quarter of people watched TV in a neighbour's house and men often watched it in a tea stall or around the local shops.

#### **Preferred TV watching times**



Q: Thinking about your general viewing habits on typical weekdays/weekends, what time do you watch TV?

#### **Mobile phones**

Mobile phones were predominantly used to make calls, although 21% of people used their phone to listen to the radio and 19% used it for text messaging. Young men were most likely to use their mobile phones to send texts and to listen to the radio. People tended to subscribe to more than one network. The biggest network was Grameenphone (62%), followed by Banglalink (34%).

#### Radio

Radio was accessed much less than TV in Bangladesh. Radio Foorti was the most popular channel among radio listeners (41%), followed by Radio Amar (28%) and Radio Today (27%); all three are music channels. Radio was more popular in urban areas, where it was often accessed through mobile phones.

#### **Newspapers**

Newspaper readership was predominantly male and very regular; most read a newspaper every day. Prothom Alo (First Light) was the most read paper, with 17% of newspaper readers reading it regularly. Newspapers were passed around communities. People spoke of friends or neighbours subscribing to the paper and then passing it on when they had read it or reading out important news that they had read.

#### The internet

Few people had used the internet, but some knew younger people who had accessed it. Others said they had tried to use it but using it through their phone was prohibitively expensive.

#### The community

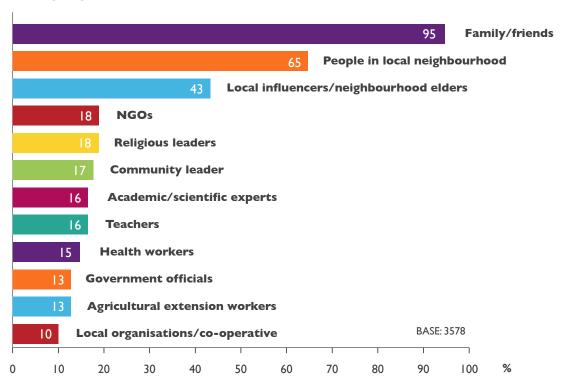
Family, friends and neighbours are all important and trusted sources of information for people in Bangladesh. Women often stressed the importance of gossiping:

Men also talked about having meeting points, such as markets and bus stands, where they could share information and gossip, especially when there was no electricity. In some cases these meeting places had already been targeted by NGOs as somewhere to station themselves to distribute information effectively.

"Our gossiping is not just gossiping rather it is also a good source of knowledge. We talk a lot about religion and our problems."

(Woman, Mymensingh, smaller city, age 35-44)

#### Who people talk to about climate issues



Q: Who do you currently talk to, or who talks to you, for advice or information on issues discussed today (water, food, energy, extreme weather)?



## WHO FORMS OPINION IN BANGLADESHI SOCIETY AND HOW TO REACH THEM

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.

Opinion formers were seen as an important source of information for the public. Opinion formers tended to be male (76%), over 45 years old, more educated and more economically comfortable than the average person. Forty-three per cent of people went to trusted elders when they wanted information.

Opinion formers felt they were more informed about changes happening than the public. They also had greater awareness of climate change and were more likely to believe it was happening. They discussed changes in resources and climate more frequently and with a greater variety of people and institutions. They liked helping people by providing information (80%) and were eager to increase awareness of their community (93%). Their main information channels were friends and family (96%) and TV (96%) but they were also far more likely to read newspapers (66%) than non-opinion formers (38%).

Imams and religious institutions were highly trusted by people, but were only used as sources of information on this topic by a fifth of the population. People explained that sometimes imams didn't feel comfortable giving agricultural advice as the people they were preaching to might be better informed than they were. They could, however, be a possible channel for communication. A government official from the north west discussed how imams in the division were already being trained to be involved in raising social awareness and how this could be extended to climate change communication:

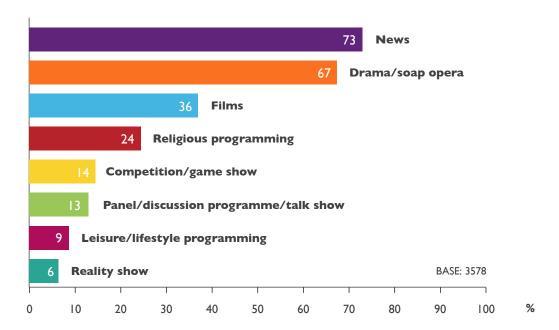
"More than 70,000 imams from the region have been trained to be involved with social awareness... If the imams give their religious Friday speeches on climate change, if they ask people to plant more trees, not to fill up natural ponds, that will help create awareness among the people."

(In-depth interview, government representative)

#### WHAT PEOPLE WANT

Television was overwhelmingly seen as the preferred source of information on these issues (81%) and people suggested dramas, reality shows or public service announcements would be good programme formats. People in rural areas also suggested announcements via microphone or a travelling cinema.

#### Programme formats people like to watch/listen to



Q: Thinking about the media that you consume, in general, which of the following formats of programmes do you like to watch/listen to?



## **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.

#### FISHERMEN AND FARMERS

Struggling: Wanting to take action, but finding it very difficult.



#### Distribution of fishermen and farmers across the five segments

	Surviving	Struggling	Adapting	Willing	Unaffected
%	%	%	%	%	%
All	9	31	18	27	16
Fishermen and farmers	8	43	15	23	11

Base (farmers and fishermen segmented) = 379

#### Who are they?

Fishermen and farmers are almost all male (98%); however, women in the family may also be involved with household farming activities. Fishermen and farmers tend to be older and poorer, care for the natural environment and have a strong desire to maintain their health and lifestyle, and have a better future for their children.

#### Why choose them?

Changes in weather, climate and resources have a direct impact on the livelihoods of fishermen and farmers.

#### Information sources

Ninety-one per cent of this group use TV to receive information on changes in climate. They also frequently use mobile phones -85% of fishermen and farmers reported using one "yesterday or today".

Agricultural extension workers were a highly trusted source of information (82%). However, there was scepticism from some people about their knowledge. For example, in one community in the south of Bangladesh, extension workers were felt to lack experience and up-to-date information.

#### Reaching this audience: television and mobile phones

Many farmers and fishermen find it difficult to respond. TV can play a role in inspiring them, making them feel that they can make changes, by showing examples of fishermen and farmers across the country making changes, such as growing new crops or diversifying livelihoods. In addition, showing how other farmers and fishermen are finding things difficult will reassure them that they are not alone.



Fishermen and farmers need information tailored to their area, for instance, information on soil salinity in the south and drought in the north. Mobile phone initiatives can deliver highly relevant and localised information pre-selected by the fishermen and farmers themselves. In Bangladesh, mobiles are already being used to provide localised information on agricultural techniques, weather and market prices. A system of interactive voice response, where farmers speak into a mobile phone and get an automated response that relates to their query, could be used to extend the reach of this information beyond literate people.

Fishermen and farmers have higher than average community co-operation. Mobile programmes can increase this co-operation and community engagement by providing the opportunity to exchange contacts with others, so they can share experiences.

Despite being a useful method of delivering information, mobile initiatives are most effective when used in combination with other streams of support such as mobile helplines, local "plant clinics" – where farmers can ask advice about failing crops – and existing NGO initiatives. Using mobiles in tandem with person-to-person communication provides fishermen and farmers with the opportunity to build knowledge by asking questions. It also increases trust in information that is delivered via text, as it can be verified in person.

#### LARGER CITIES

Surviving: Finding it too hard to take action



#### Distribution of people who live in larger cities across the five segments

	Surviving	Struggling	Adapting	Willing	Unaffected
%	%	%	%	%	%
All	9	31	18	27	16
Larger cities	13	24	23	28	12

Base (people who live in larger cities segmented) = 377

#### Who are they?

People living in larger cities are younger than those in other areas, with over half (57%) aged under 34. Many are new to the cities. A third of people have moved to larger cities in the last five years and over half have moved there in the last II years. Their main motivations are the need to survive, to be healthy and to provide a better future for their children.



#### Why choose them?

People in larger cities are making large changes, such as changing their job, but are not taking as many small actions. They feel at risk from cyclones and floods, but only half are preparing for these events. They feel less involved in their community than people in rural areas and smaller cities, in part because they are new to the city. They also think the government should support them. Because they don't have enough resources, they don't know how to respond and don't feel that their action would make a difference.

#### Information sources

TV is the best way to reach this group. Most have access to cable and satellite, they trust TV and use it to get information about these issues.

#### Reaching this audience: TV to entertain, inspire and inform

These people need to be motivated to respond and to feel that it is possible for them to make changes. They need to be shown what they can do within the confines of city life. Examples could include how to plan for disasters. They also need support from experts and people like them who have been successful in making inexpensive changes to their lifestyles and livelihoods.

TV programmes could show everyday scenarios and focus on how people can deal with problems, such as what to do when struggling to work in the heat.

Larger cities also have lower community co-operation than other areas, so TV programme could demonstrate the benefits of working together and how more can be achieved together than working alone, for instance, working with their community to secure water.

The format of the show should be entertaining to get people discussing the programme. It could also have elements of audience interaction to engage people in the topic.

#### **BARISAL DIVISION**



Distribution of people in Barisal across the five segments

	Surviving	Struggling	Adapting	Willing	Unaffected
%	%	%	%	%	%
All	9	31	18	27	16
Barisal	3	57	17	23	0

Base (respondents from Barisal segmented) = 180



#### Who are they?

Barisal is relatively geographically isolated with much of its population living on char land (small islands) and 80% living in rural areas. Over three-quarters of the population are poor or very poor. People care for the natural environment, want to be healthier, make more money and secure a better future for their children.

#### Why choose them?

Historically, Barisal has been hit by cyclones and floods and has suffered severely from salination of its land and water. Many people are migrating from this region to Dhaka. People feel above average impacts from changes in climate and key resources, but are making fewer changes to their lives than most. This lack of action is not because they are unwilling or complacent; over 90% of people feel the need to make further changes and are willing to make them. But they face barriers to action, particularly a lack of government support and money.

#### Information sources

Community co-operation is particularly high in Barisal. People rely on friends and family (96%) and their local neighbourhood (80%) for information and tend to discuss issues related to climate frequently. Media penetration is lower in Barisal than other divisions, but people want information through TV (75%).

#### Reaching this audience

Fifty-seven per cent of Barisal fall into the struggling segment – feeling impact, but facing barriers to response. Sharing examples of how others have been able to respond, via media or through person-to-person communication, could inspire action and give people both ideas on ways to respond and the confidence to do so.

People feel a major barrier is lack of resources. There are a large number of NGOs active in the region. Working with NGOs to help them understand the communication and information needs of their audiences could result in more targeted, effective and relevant initiatives for Barisal. There is a real potential for collaboration between these organisations and small media active in the region, for instance, community radio stations that have access to strong local networks.

## 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 a mixed methods approach, including 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 Bangladesh, qualitative research included 20 in-depth interviews with experts and opinion formers, 16 audience focus groups and 7 community assessments across Bangladesh.

The in-depth interviews were conducted with key experts and opinion formers from national and local government, the media, the private sector, civil society, science and academia. Focus group participants were members of the public from across five divisions in Bangladesh and included people from rural areas, smaller cities with under I million people and larger cities with over I million people. 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.

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 Bangladesh, the project surveyed 3,578 people following a stratified random sampling approach. First, the country's population was separated by division. In each division, districts were chosen randomly. The number of districts selected in each division was based on the population of the division. Within each district, a certain number of areas were chosen from urban and rural areas following the probability proportionate to size (PPS) method. A total of 175 areas were chosen across Bangladesh. Within each area, 20 households were randomly selected following the right-hand rule of field movement and five households were skipped after every successful interview.

The data was then analysed using many different variables to examine patterns in the data. One variable used was the type of area. This variable involved splitting up areas into three groups: rural, smaller cities of under I million and larger cities of over I million. Based on data from the Bangladesh Bureau of Statistics<sup>7</sup>, cities of over I million were Dhaka and Chittagong.

The quantitative research was carried out during the summer. If it had been carried out at a different time of the year it is possible that this might have produced slightly different results, for instance, perceptions of change in rainfall.

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