MYANMAR

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

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CLIMATE CHANGE IS ABOUT PEOPLE

How do people in Myanmar live with climate change now? How will its impacts shape people's 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 around this issue?

These are some of the questions that BBC Media Action's regional research and communication project Climate Asia attempts to answer. In 2012 BBC Media Action conducted a large-scale study of people's everyday experience of climate change, funded by the UK Department for International Development (DFID). The project surveyed 33,500 people across seven Asian countries: Bangladesh, China, India, Indonesia, Nepal, Pakistan and Vietnam.

In 2015, as part of the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) project also funded by DFID, BBC Media Action carried out a similar survey with people in Myanmar. Researchers interviewed 3,000 people between July and September 2015 in five geographic zones in Myanmar: Coastal, Delta, Dry, Hilly and Plain.

Using findings from the quantitative study, BBC Media Action has built a nationally representative picture of how people in Myanmar live and deal with changes in the weather and environment. Understanding a number of key topics is essential for creating communication that motivates people to take action. These include people's concerns in life, their perception of changes in the climate, ways of adapting to these changes, preparations for extreme weather events, media access and the most trusted sources on issues relating to changes in the weather and environment.

This report is one of many tools created as part of the Climate Asia project. Each tool is designed to help plan and implement programmes to support people to adapt to the changes they face. All data from the Myanmar Climate Asia study is available on the fully searchable and public BBC Media Action data portal, dataportal.bbcmediaaction.org. This includes a climate communication guide and information on Climate Asia's research methods and tools, including the survey questionnaire.

ABOUT BRACED

The BRACED project in Myanmar is a global DFID-funded programme with an overall goal of improving resilience to climate- and disaster-related shocks and stresses. Specifically, the BRACED Myanmar programme aims to reduce death, loss and damages due to extreme climate conditions and to help protect the livelihoods of people at risk of climate extremes. The programme also focuses on improving institutional capacity to conduct and support resilience actions.

In Myanmar, BRACED is run by a consortium of six development partners: Plan International, UN-Habitat, ActionAid, World Vision, Myanmar Environment Institute and BBC Media Action. This consortium is co-ordinated by the Alliance Coordination Unit (ACU) based in Yangon, with overall technical and operational support from Plan UK and global strategic partners such as KPMG and the Overseas Development Institute (ODI).

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, BBC Media Action provides information and stimulates 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.

WHAT'S THE STORY?

PEOPLE IN MYANMAR ARE FEELING THE EFFECTS OF CLIMATE CHANGE AND MANY ARE TAKING ACTION

People interviewed in Myanmar have perceived widespread changes in the weather over the last 10 years. Many feel that temperatures are on the rise, while half feel that rainfall has increased.

They also feel that the environment has changed. Eighty per cent of respondents believe that the number of insects and pests has increased and three in five respondents perceive that the number of trees has decreased in the country. Many also note pressure on agricultural production in the country: over a quarter (28%) feel that this has decreased over the past decade.

Myanmar is vulnerable to destructive earthquakes and cyclones, and flooding and landslides are common during the rainy season. Around a third of those interviewed feel that drought and flooding have become more frequent in recent years, and three-quarters say they feel worried about extreme weather events. People are taking action to prepare for such an event by listening to the radio, signing up to early warning alerts and making permanent adjustments to their homes. Despite demonstrating relatively high levels of preparation for a future disaster, four in five (79%) respondents feel unprepared for an extreme weather event.

People are particularly feeling the impact of changes in the weather and environment on their incomes. Sixty-three per cent of respondents feel changes have affected their ability to earn money. People in rural areas are addressing these challenges by changing jobs and adapting their agricultural production, for example, by growing alternative crops or changing seed varieties. Regionally, people in the Delta and Dry zones are taking the most action. Respondents who are very poor, who have fewer resources and limited access to information, are less likely to have made longer- term changes to deal with agricultural challenges.

People who are adapting want to take more action: 65% of people who have made changes to their livelihoods feel that more change is needed. Among this group, 70% feel willing to make further changes, compared with 31% of those who have not made changes.

The majority of people in Myanmar feel that they need more help from institutions to take action. Almost everyone included in the study highlighted the need for more support from government and NGOs to address the impacts they are experiencing.

Another reason for not taking action is a lack of information. While half of the respondents (49%) feel informed about how to deal with these changes, the other half (49%) do not. There are large regional differences in perceived knowledge about these issues: two-thirds (65%) in the Delta feel informed, compared with only a third (35%) in the Coastal zone. Rural and low-income communities are more likely to feel uninformed, indicating a need to target communication more effectively to reach a wider range of audiences.

WHAT THIS MEANS FOR COMMUNICATION

COMMUNICATION CAN HELP TO INFORM PEOPLE ABOUT HOW AND WHY TO TAKE ACTION

The research shows that, in Myanmar, communication initiatives are not reaching large parts of the target population. Two-fifths (43%) of people are aware of existing communications related to changes in the weather or environment, while more than half (57%) are not. Awareness of existing communications is mostly limited to radio and television weather reports. This indicates a need for both increased access to information, as well as improved quality of communication. Audiences need practical and actionable information on addressing the weather- and climate-related challenges they face.

Certainly, those who are taking more action to prepare for extreme weather events are more likely to feel well informed, indicating the importance of more communication on disaster preparedness. Media can help to address people's fears and feelings of unpreparedness for a potential natural disaster by showing how households and communities can take action now.

Many say they feel the impact of weather and environmental changes in their everyday lives, particularly on their incomes and health. Communications that focus on the impacts people are feeling most are more likely to engage struggling audiences if they can showcase how responding might deliver benefits. This should focus particularly on low-cost solutions as many feel that a lack of resources is a key barrier to taking action. Examples of simple, affordable solutions could illustrate how individuals can take action in Myanmar.

Another key barrier to address is the perception that the changes people are experiencing are outside their control. Qualitative research conducted by BBC Media Action highlighted that many are resigned to changes in the environment and feel powerless to make changes. Communication can address this, highlighting how individuals can take action and the benefits of doing so.

As well as building individual efficacy, more can be done to encourage community action. In Myanmar, people strongly believe that their community can take action but not everybody feels confident about being able to play a part in this response. Encouraging people to solve problems as a community rather than on their own could help to overcome the challenge of limited individual resources, improving overall community resilience against changes.

The majority of people in Myanmar point to the need for more support from institutions such as local and national governments and NGOs. Current household and community actions can be amplified by highlighting how and where people can get support, connecting them with local government institutions and NGOs operating in their area.

There is a role for communication in Myanmar to build individual and community empowerment, as well as institutional accountability, highlighting who is responsible for what in improving the overall resilience of communities across the country.

HOW TO USE THIS REPORT

This report presents findings from across Myanmar. It seeks to build a picture of how people live 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 people in Myanmar live now – it focuses on their perception of changes in the country and their main concerns.

Section 2 outlines the people of Myanmar's perceptions of changes in the climate, access to key resources, and their knowledge and understanding of climate change.

Section 3 describes how people in Myanmar are responding to changes in the climate, including how they are adapting to changes in agricultural productivity and preparing for extreme weather events.

Section 4 analyses the factors that enable and constrain people's responses to climate change in Myanmar, how informed people feel around the issue and the need for more external support to prompt action.

Section 5 profiles Myanmar's media landscape to help to clarify the optimum channels for reaching audiences.

Sections 6 and 7 demonstrate how the media can reach key audiences in Myanmar to facilitate action to respond to the impacts of climate change.

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METHODOLOGY

QUANTITATIVE RESEARCH

In Myanmar, the Climate Asia project surveyed 3,000 people. First, the country's population was separated into five geographic zones (Coastal, Delta, Dry, Hilly and Plain). To ensure a nationally representative sample within the geographic zones, researchers used probability proportionate to size (PPS) methodology to randomly select locations for fieldwork within each zone. Village-tracts and wards were the smallest administrative units in rural and urban areas, respectively. Households were randomly selected following the right-hand rule of field movement and five households were skipped after every contacted household.

The research was carried out in July to September 2015. In the early stages of fieldwork, floods came to Myanmar and had a significant impact on communities across the country. If the study had been carried out at a different time of year, it might have produced different results, particularly in perceptions of change in levels of rainfall or flooding.

There were four sections of the study that only half of the sample (1,500 people) were asked, to reduce the length of the interview. These sections related to availability of water, fuel and electricity, food and agriculture and preparations for extreme weather events.

ADDITIONAL SOURCES

Qualitative research

BBC Media Action conducted small-scale qualitative research in August 2015. This was intended to inform the development of Public Service Announcements (PSAs) designed to improve resilience to weather-related risks in Myanmar. Six focus group discussions (FGDs) were completed in rural locations. Locations represented different climatic zones in the country: Dry, Hilly and Delta/Coastal. Low-income individuals working on, or with, the land were the key focus for the research, as they are often the most vulnerable to weather changes and to extreme weather.

BRACED validation workshop

In April 2016 BBC Media Action hosted a workshop to share key findings from the Climate Asia quantitative research. This provided an important forum to discuss, validate and challenge the Myanmar results. BRACED implementing partners added additional context and insights to enrich analysis of the findings.

STUDY SAMPLE

The Climate Asia study provides a nationally representative perspective from people in Myanmar aged 15 and over. Table 1 provides an overview of key demographic groups in the sample. The data was weighted by age, gender and location using results from the 2014 Myanmar Household Census.

Table I: Demographic breakdown of research participants

Demograp	hics		Survey proportions (weighted) Total sample: 3000
	Female		53%
Sex	Male		47%
	15–24		25%
	25–34		23%
	35–44		19%
Age	45–54		15%
	55–64		10%
	65+		8%
	Urban		31%
	Rural		69%
	Coastal	Tanintharyi, Mon, Rakhine	11%
Location	Delta	Ayeyarwaddy	12%
	Dry	Sagaing, Magway, Mandalay, Naypyitaw	34%
	Hilly	Shan, Kachin, Kayin, Chin	18%
	Plain	Bago, Yangon	25%
	.,	We do not have enough money, even for food	8%
	Very poor	We can afford food but purchasing clothes is a serious problem	21%
	Poor	We can afford food and clothes, but purchasing durables, such as a TV set or refrigerator, is difficult	47%
Income	Comfortable	We can afford main household appliances, but purchasing a car is beyond our means	20%
	Connortable	What we earn is sufficient to buy anything except expensive purchases such as an apartment or house	3%
	Well-off	We do not face financial problems. If necessary, we can buy an apartment or a house	1%
	No schooling		13%
	Primary school		37%
Education	Middle school	24%	
	High school	16%	
	College or univ		10%
	Farmers, agricu	Itural labourers, fishermen	29%
Occupation	Professionals		23%
- ccapacion	Unskilled work	ers	14%
	Not working (h	nousewives, students, retired)	34%

LIFE IN MYANMAR

This section outlines how people in Myanmar live and their top concerns.

PEOPLE FEEL THAT LIFE HAS IMPROVED

In the past decade, Myanmar has undergone a period of change and development. The country has developed a more democratic system of governance, opened up the economy to foreign investment, demonstrated improvements in press freedom and made progress with peace agreements between ethnic groups.

These changes are reflected in people's general perception of Myanmar: most felt that their life had improved over the past five years, though people were more likely to feel that their life was only a bit better (48%) rather than a lot better (9%).

In line with the overall perception that their life had improved, 53% of respondents believed that their household income had increased in the past five years, compared with 19% who felt it had decreased.

The Climate Asia study shows that the poorest groups in Myanmar were less likely to feel the benefit of recent developments. Those classed as very poor were much less likely to feel their household income had increased in recent years (38% compared with 53% overall) and only two in five felt that life had improved in the past five years (41% compared with 58% overall²).

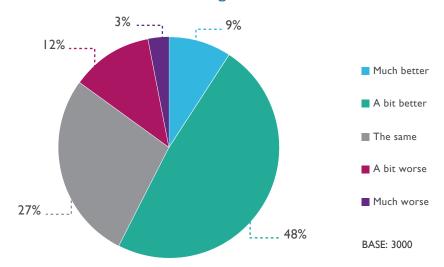


Figure I: Views on whether life has got better or worse

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

[&]quot;Very poor": struggle to afford food, or can afford food but not clothing.

²Responses for "much better" and "a bit better" total 58% due to percentage rounding.

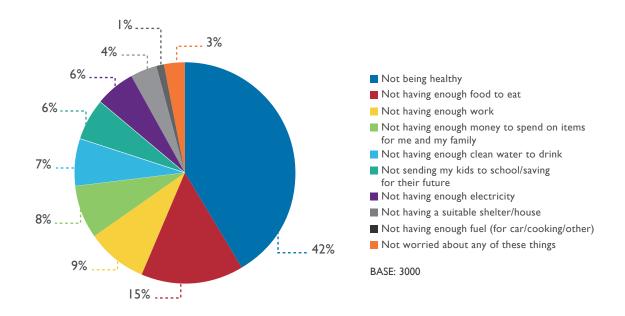
HEALTH IS PEOPLE'S BIGGEST WORRY

When asked about their top concerns, 42% of respondents said that they were most worried about not being healthy.

This reflects wider findings in the Climate Asia studies, where health was people's primary concern across a number of other countries. However, some respondents in neighbouring countries cited other basic needs as their top worries – such as not having enough clean water to drink (32% in India) or not having enough electricity (26% in Bangladesh).

Among the lowest income groups in Myanmar, health remained the most prevalent worry (33%, compared with 42% overall) but the poorest respondents were more likely to highlight not having enough food to eat as a top concern (26% compared with 15% overall).

Figure 2: Biggest worry



Q: Out of the following, which is your biggest worry at the moment?

CHANGES IN CLIMATE

People in Myanmar are noticing changes in the climate. This section focuses on people's perceptions of changes in temperature, rainfall, extreme weather events and the availability of key resources. It also details people's awareness and understanding of climate change.

MYANMAR IS A COUNTRY AT HIGH RISK OF CLIMATE-RELATED DISASTERS

Myanmar is vulnerable to a wide range of slow and rapid onset natural hazards, including floods, cyclones, droughts, earthquakes, landslides and tsunamis. It ranks as the most "at-risk" country in Asia and the Pacific, according to the UN risk model, and is classed as the second most weather-related disaster-prone country in the world.³

Since 2005, Myanmar has experienced regular extreme weather events. The most significant was Cyclone Nargis in 2008, which killed more than 138,000 people. More recently in July 2015, while the Climate Asia study was being conducted in Myanmar, Cyclone Komen brought strong winds and heavy rainfall to the country. This resulted in some of Myanmar's worst floods for decades. It is estimated that floods and landslides displaced more than 1.6 million people across 12 zones and states.⁴ Around one in 10 (11%) of those interviewed in this study were living in flood-affected areas.⁵

Not everyone has heard of climate change, but changes in climate affect everyone. In order to find out how, Climate Asia researchers first asked questions about people's perception of changes in temperature, rainfall and extreme weather events over a 10-year period. They then asked a series of questions about changes in the availability of key resources such as food, water and energy and changes to participants' environments. Finally, researchers asked a series of specific questions on "climate change".

This section does not include any comparison with existing meteorological or developmental records.

³ Germanwatch 2016: "Global Climate Risk Index 2016: Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2014 and 1995 to 2014".

⁴According to the National Natural Disaster Management Committee (NNDMC).

⁵ 334 respondents from the total sample lived in areas affected by the floods. These were mainly in the Dry zone (42%), followed by Plain (27%), Coastal (15%), Delta (14%) and Hilly (3%). Flooding began in the early stages of fieldwork. Affected areas were only recorded after the first 100 interviews were completed.

PERCEPTIONS OF CHANGING WEATHER: HOTTER AND WETTER

The survey asked people how they felt the weather had changed over the last 10 years. In Myanmar, almost all respondents pointed to increased temperatures in both the hot (94%) and cold (70%) seasons. Alongside this, half (52%) felt that rainfall had increased (31% felt rainfall had decreased).

When asked about extreme weather events, most people thought that the frequency of events had been consistent over the past 10 years but around a third believed that droughts (36%) and floods (34%) had increased. Floods happening at the time of the research likely influenced these results. Seventy-eight per cent of those living in flood-affected areas stated that flood frequency had increased compared with 28% in non-affected communities.

Aside from increased temperatures felt across the country, there were notable differences in perceived environmental changes across the geographic zones in Myanmar.

Coastal: mirroring the overall view, more than half (57%) of people in the Coastal zone felt that rainfall had increased.

Delta: people in the Delta zone perceived the highest level of changes. At least half of these respondents felt that rainfall (52%), floods (53%) and cyclones (50%) had increased.

Dry: respondents in the Dry zone were most likely to have noticed increased drought (59%). This was the only zone where the majority felt that rainfall had decreased (51%).

Hilly: almost half (49%) of these respondents felt that rainfall had increased, while a third (33%) felt that it was less frequent. A third (33%) believed that drought had increased.

Plain: here, 70% of respondents felt that rainfall had increased. After the Delta, people in the Plain zone had the highest perception that extreme weather events were increasing in frequency: 49% felt that flooding had increased and 38% pointed to more regular cyclones.

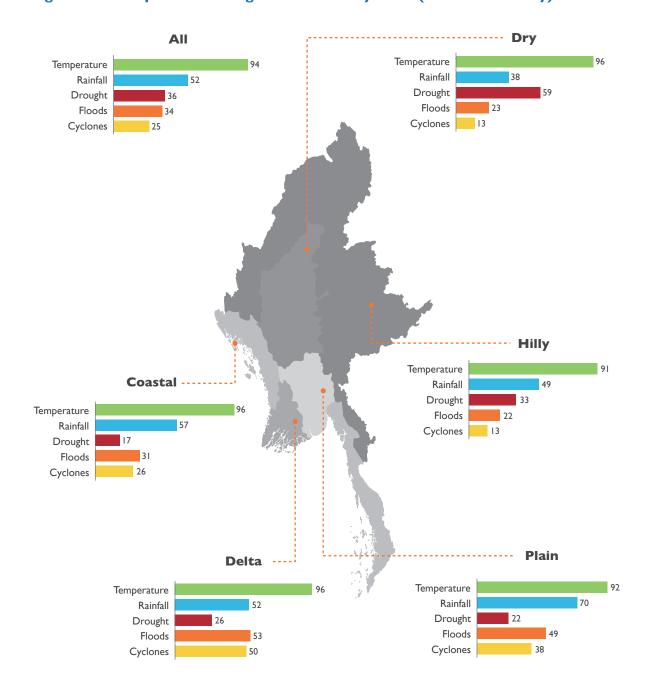


Figure 3: Perception of changes in climate by zone (% increases only)

BASE: 3000

Q: Over the last 10 years, do you think the following (temperature, rainfall, drought, floods and cyclones) have increased, stayed the same or decreased? Note that for temperature, the responses refer to the hot season only.

PERCEPTION OF AVAILABILITY OF KEY RESOURCES: MOSTLY STABLE BUT FUEL IS A CONCERN

Overall, people in Myanmar perceived access to key resources such as water, electricity and energy as consistent or increasing – more so in urban than rural communities.

More than half (51%) felt that access to water had improved over the previous decade – only 15% felt that it had decreased.

Access to electricity was generally viewed as consistent or improving over this period. Half (50%) of the respondents felt that access has stayed the same over the past 10 years, while 46% said that it had increased. Increased access to electricity was a more common perception among urban rather than rural communities (64% and 38%, respectively).

Across the country, many respondents noted the pressure on access to fuel such as firewood – 42% felt that access had decreased in the past 10 years, while 22% felt that it had increased.

As with perceived changes in the environment, the five zones felt different pressures on access to key resources:

Coastal: though just over half of Coastal respondents felt that access to water had stayed the same (51%), people in this zone were the least likely to feel that access had increased (33%, compared with 51% overall).

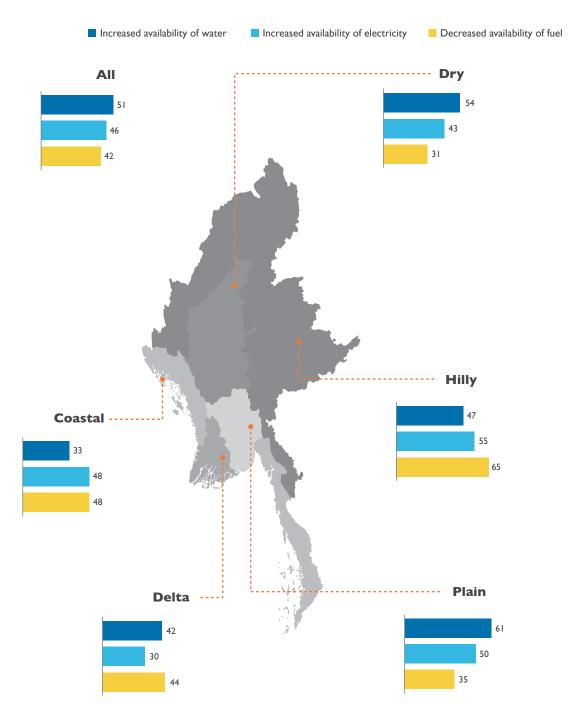
Delta: two-thirds of Delta respondents (66%) felt that access to electricity had stayed the same, but people from this zone were the least likely to say that access had increased (30%, compared with 46% overall).

Dry: despite high levels of local drought, people in the Dry zone believed that access to water had increased overall (54%). They were least likely to feel that access to fuel had decreased (31%, compared with 42% overall).

Hilly: people here experienced a much higher pressure on access to fuel: 65% felt that fuel access had decreased in recent years and only 15% felt that it had increased.

Plain: people in the Plain zone were most likely to feel that access to water had increased (61%, compared with 51% overall). Only 8% of respondents in this zone felt that water access had decreased.

Figure 4: Perceived changes in access to resources (%)



BASE: 3000

Q: Over the last 10 years, do you think the following (water, electricity and fuel) have increased, stayed the same or decreased?

OVER A QUARTER FEEL THAT AGRICULTURAL PRODUCTIVITY HAS DECREASED

In Myanmar, half of those interviewed (50%) felt that agricultural production had stayed the same over the past 10 years. However, 28% felt that the land's ability to yield crops or vegetables had decreased in recent years and only 14% believed that it had increased. People in the Coastal zone had the highest perception that agricultural productivity had reduced (38%), while communities in the Delta and Dry zones were less likely to feel this.

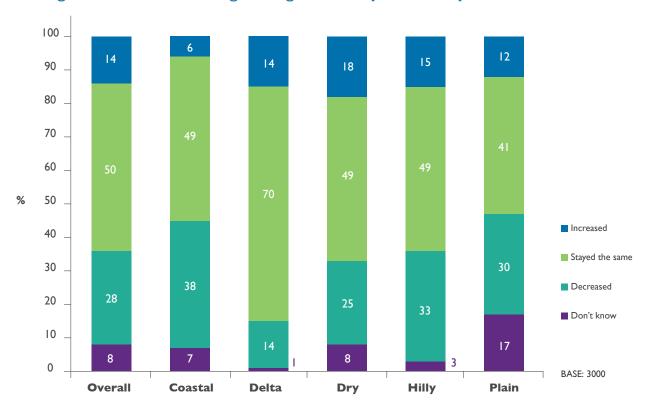


Figure 5: Perceived changes in agricultural productivity

Q: Over the last 10 years, do you think agricultural productivity – the ability of land to yield vegetables/crops – has increased, stayed the same or decreased?

MORE PESTS AND FEWER TREES

Alongside changes in the weather, people in Myanmar perceived wider changes in their environment in the past 10 years. Eighty per cent of respondents felt that the number of insects and pests had increased – significantly higher than the Climate Asia average of 47%.⁶ Only 8% felt that pests had fallen in Myanmar.

⁶ Mean average across the seven countries included in the 2012 Climate Asia study.

Overall, 62% of people in Myanmar perceived a loss of trees over the past 10 years. This result was highest in the Hilly zone (79%). Reflecting these findings, the UN's Food and Agriculture Organization (FAO) has noted high levels of deforestation in Myanmar – since 2010, the country has lost an average of more than 546,000 hectares (1.3 million acres) of forest each year.⁷

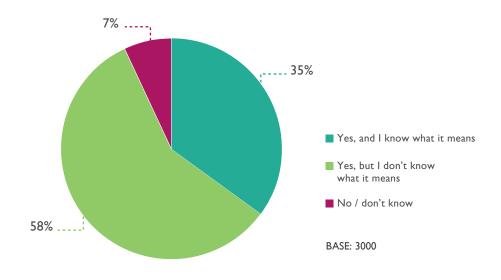
AWARENESS OF CLIMATE CHANGE IS HIGH BUT UNDERSTANDING IS LIMITED

At the end of this study, researchers asked respondents if they were aware of the term "climate change". In Myanmar, awareness of the term was very high: 93% said they had heard of it. This is much higher than other countries surveyed in 2012, which averaged 67%.

However, awareness of this term did not reflect higher understanding of it. Only 35% of people felt confident that they knew what the term meant, compared with 51% across the other Climate Asia studies. This was particularly high in China and Bangladesh in 2012 (70% and 62%, respectively).

When told what climate change meant,8 almost all (94%) agreed that it was happening in Myanmar.

Figure 6: Heard of the term "climate change"



Q: Have you heard of the term "climate change"?

⁷UN Food and Agriculture Organization (2015) Myanmar, Global Forest Resources Assessment.

^{8 &}quot;Climate change refers to a change in climate that persists for decades or longer."

MANY BELIEVE CHANGES ARE DUE TO UNCONTROLLABLE FACTORS

When asked about the main causes of climate change, people in Myanmar were most likely to point to the loss of trees (91%), probably due to the high levels of deforestation in the country as noted above.

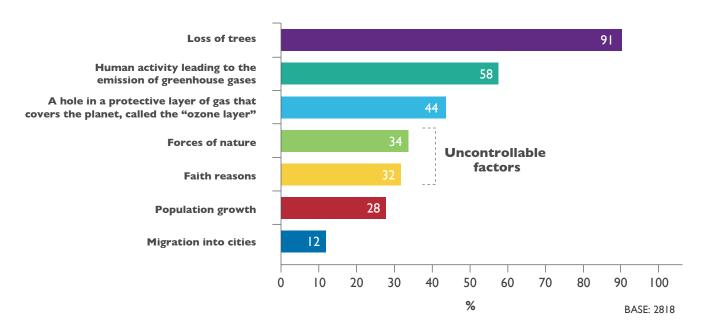


Figure 7: Causes of climate change

Q: Which of the following do you think are the main causes of climate change? Asked only among those who believed climate change was happening. Multiple responses permitted.

Rural audiences, who felt less knowledgeable overall about the causes of climate change, cited the same primary causes but were also more likely to point to faith-related factors (34% in rural areas, compared with 27% in urban areas) as a potential cause rather than human-influenced factors. This was much higher than the Climate Asia regional average of 18%.

Qualitative research, carried out by BBC Media Action in rural communities as part of the BRACED project, highlighted that many believed that changes in the environment and extreme weather events came as punishment to individuals and communities.

"Climate change is due to people's immoral deeds and this heavy rain [flooding] has come to clean people's wrong-doing."

(Younger male, Dry zone)

"No matter how hard we work [for preparation] as humans, we have no power. It's possible only by God."

(Older female, Hilly zone)

"There is a saying that there is storm and flood in every ninth year of the Myanmar calendar, Marlar, Nargis and the tsunami – they all happened in the ninth year."

(Older male, Delta zone)

The belief that changes in the weather are a result of elements outside of an individual's control is a crucial factor influencing understanding of the impacts of climate change. If people in Myanmar feel that climate changes are in the hands of fate, they may be less likely to believe that taking action will bring benefits.

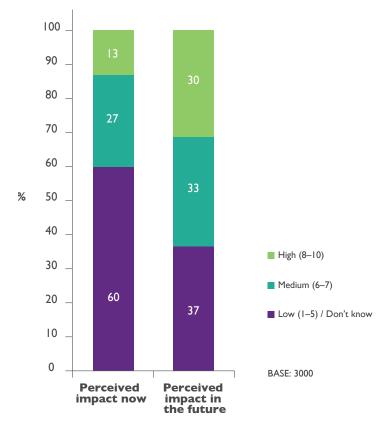
IMPACT AND RESPONSES

People are feeling impact on their lives as a result of changes in climate and availability of key resources. This section describes how people feel they are being affected and what they are doing to respond.

Respondents in the Climate Asia studies found it difficult to distinguish between impacts associated with the availability of key resources and those associated with changes in climate. Taking this into account, survey questions on impact were phrased: "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."

IMPACT OF CHANGES: LOW AT PRESENT BUT MORE TO COME

Figure 8: Perceived impact from changes in the weather and resources9



⁹ Perceived impact now "Don't know" response: 0.3%. Perceived impact in the future "Don't know" response: 2.4%.

Table 2: Present and future impact of changes by zone

	Overall	Coastal	Delta	Dry	Hilly	Plain
Base	3000	340	370	980	580	730
High present impact	13%	8%	19%	11%	18%	12%
High future impact	30%	20%	38%	29%	31%	33%

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

Researchers asked people in Myanmar what impact the changes in weather and resource availability had on their lives. Despite the high levels of changes they had reported, just 13% said that they were feeling high impacts at that time.¹⁰

People living in the Coastal zone were the least likely to report that changes in weather and resource patterns were having a high impact at the time (8%), although people in this zone perceived a large degree of change in their environment over the past 10 years. In this zone, the percentage of respondents who perceived a high current impact of these changes ranged from 2% in Tanintharyi and 5% in Mon, through to 21% in Rakhine state.

The overall results indicate a disconnect in Myanmar between the climate and environmental changes people perceive, and their perceptions of risk due to these changes. This is particularly notable compared with other Climate Asia countries. In neighbouring Bangladesh, 34% said that the changes were having a high impact on their lives.

One of the reasons for this gap between perceived changes and impact may be that people in Myanmar, a country regularly affected by climate extremes, see these events as an inevitable part of everyday life and do not connect changes in the environment with day-to-day challenges.

 $^{^{10}}$ "High impact": Respondents who selected 8, 9 or 10 on a scale of I = no impact to 10 = very high impact.



Though many did not feel that the impacts of weather and resource changes were high at the time of the study, people in Myanmar were more likely to believe that this would have an increasing impact on their lives: 30% believed that future impacts of these changes would be high. This trend was similar to other countries, where the future impact of weather and resource changes was perceived to be higher than the present impact. Pakistan was the only country that did not follow this pattern (see Table 3).

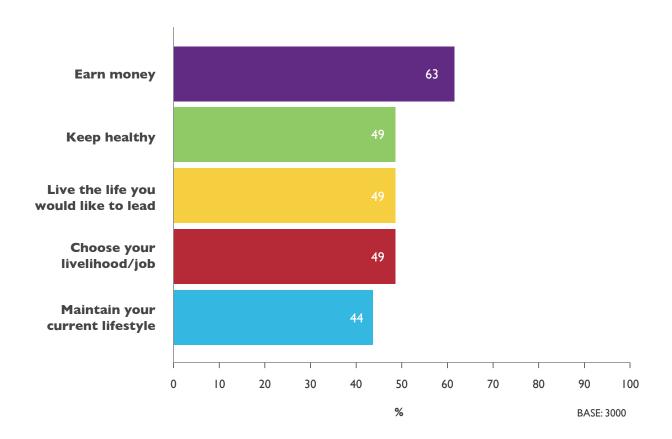
Table 3: Perceived impact from changes in the weather and resources (Myanmar versus other Climate Asia countries)

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Base	3000	3578	5062	8368	4985	2354	4128	3486
High present impact	13%	34%	20%	40%	22%	17%	44%	30%
High future impact	30%	52%	33%	57%	43%	66%	44%	46%

CHANGES ARE AFFECTING LIVELIHOODS AND HEALTH, RESPONDENTS FEEL

When asked about the impact of weather and resource changes on their lives, respondents were most likely to point to concerns about their ability to earn money, followed by their general health and wellbeing.

Figure 9: Perceived impact of changes in the weather and environment (% very or fairly impacted)



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



RESPONDENTS SAY CLIMATE CHANGES ARE HITTING INCOMES

It is unsurprising that so many people felt that environmental changes were having an impact on their ability to earn money, given that a high proportion¹¹ of people in Myanmar work in industries that rely on the land, such as farming and fishing.

People in the Dry zone, where respondents said that drought has negatively affected agricultural productivity, were particularly concerned about their incomes being reduced: 67% felt their ability to earn money had been hit.

Table 4: Perceived impact of weather and resource changes on ability to earn money

	Overall	Coastal	Delta	Dry	Hilly	Plain
Base	3000	340	370	980	580	730
Fairly impacted	42%	39%	36%	49%	37%	39%
Very impacted	21%	19%	27%	18%	20%	23%
Total impacted	63%	57% ¹²	63%	67%	57%	62%

BASE: 3000

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

HEALTH: THE ENVIRONMENT CONNECTION

Overall, 49% of respondents in Myanmar stated that changes in the weather and environment had affected their ability to stay healthy. This underlines a wider primary concern about health in the country.

Those who believed these changes had affected their health were most likely to cite factors such as erratic changes in climate (33%) and illnesses caused by increased temperatures (20%).

BRACED partners¹³ also noted widespread climate-related health problems across Myanmar. For example, they observed high temperatures resulting in lower access to water, compelling communities to drink unclean water, which causes diarrhoea and other illnesses.

According to 2014 Myanmar census data, the proportion of employed people aged 15 and over by occupation was highest in "skilled agricultural, forestry and fishery workers", at 42.9%.

¹² Responses for "total impacted" sum to 57% due to rounding.

¹³ BRACED partners who participated in the data validation exercise.

Researchers asked respondents whether they had made any adjustments because of issues related to changes in – or more extreme – weather, or lack of food, water or energy.

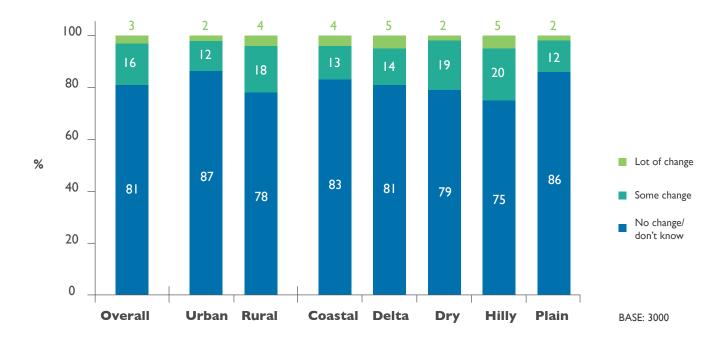
Climate Asia's use of the terms "adapting", "making changes" or "changing livelihoods" refers to people's responses to the impacts of these changes in the environment. Climate Asia's analysis does not include a reflection on the extent to which these changes or responses might be positive or negative in the short or long term, or how effective they might be.

ONE IN FIVE HAVE MADE CHANGES TO JOBS

Almost one in five (19%) said that they had made some kind of change to their livelihoods as a result of the high impact of changes in weather and resource availability. This aligns with the Climate Asia average from 2012 (18%).

People in rural areas were more likely to have made livelihood changes (22%, compared with 14% in urban locations¹⁴). Regionally, people had made more livelihood changes in the Hilly and Dry zones.

Figure 10: Changes made to livelihoods



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

¹⁴ Total 'Urban' responses sum to 101% due to rounding.



In urban locations, livelihood adaptations mostly focused on changing jobs, while rural people were making a wider range of agricultural-based changes.

People who had taken action were more likely to believe that further changes to livelihoods were needed (65%, compared with 23% of those who had not made livelihood changes) and had the highest willingness to take further action (70%, compared with 31% of those who had not made changes).

Willingness to introduce changes to jobs or livelihoods was low in Myanmar compared with other countries: 39% said that they were willing to make changes, versus an average of 48% across the seven Climate Asia countries in 2012. It was highest in Nepal (85%) and Bangladesh (68%) and lowest in India (30%).

Have made any changes Out of those who made changes: Changed job Grown alternative crops Overall Urban Changed agriculture seeds Rural Changed cultivation timing BASE: 560 Supplemented income in other ways 0 20 40 60 80 100 %

Figure II: Changes made to jobs, urban vs rural (showing top five responses)

Q: What livelihood changes have you made? (Asked among those who have made "a lot" or "some changes")

RURAL COMMUNITIES ARE TAKING ACTION TO ADDRESS AGRICULTURAL PRODUCTIVITY

As highlighted previously, 28% of respondents felt that agricultural productivity had decreased in the previous five years. This response was higher among farmers (33%).

Researchers asked what actions respondents were taking in response to concerns about agricultural productivity. Rural communities had taken a wide range of actions to address this issue. Men were slightly more likely to have made agricultural changes than women.

People in the Delta zone had taken the most action, with a high proportion stating that they were reducing food waste (79%, compared with 61% overall), growing different crops or livestock (70%, compared with 44% overall) and finding out about stock prices (58%, compared with 33% overall).

There were also higher than national average levels of activity to address agricultural productivity in the Dry zone. Here, people were most likely to have made more advanced changes such as improving soil fertility (54%, compared with 39% overall), using pesticides (53%, compared with 37% overall) and rotating crops (51%, compared with 35% overall). People in the Dry zone were also most likely to have sought advice on this issue from the government or NGOs (17%, compared with 10% overall).

While very poor income respondents had taken some action to improve agricultural productivity, they tended to be small actions such as changing their diet, reducing food waste or borrowing money, rather than longer-term changes.

Table 5: Actions taken in response to changing food availability and prices

		Overall	Rural	Urban
	Base	1500	1055	445
	Reducing food waste	61%	60%	61%
Dietary changes	Changing diet	47%	49%	42%
	Keeping food for longer	16%	15%	17%
	Growing/raising different types of crops/livestock	44%	59%	13%
Agricultural	Using technology to improve soil fertility (e.g. fertiliser)	39%	53%	6%
changes	Using pesticides to increase crop yields	37%	51%	5%
	Rotating crops	35%	47%	7%
	Borrowing money	33%	41%	15%
	Finding out about crop/livestock prices	33%	44%	10%
External support	Borrowing food items from other community members	20%	25%	8%
	Seeking technical support from government services or NGOs	10%	13%	2%

BASE: 1500

Q: Here is a list of actions people can take to help them deal with changes in food availability/food prices. Which of these actions are you currently doing?



EXTREME WEATHER: PEOPLE ARE TAKING ACTION BUT FEEL UNDER-PREPARED

In Myanmar, three-quarters of respondents (74%) said that they felt worried about extreme weather events such as cyclones and floods. When asked how prepared they felt for an extreme weather event, 79% did not feel prepared, with half of those interviewed (50%) stating that they felt not at all prepared.

2 T 6 Ī 4 2 100 Very prepared 80 34 20 Fairly prepared 29 29 60 27 ■ Not very prepared % 40 60 Not at all prepared 54 50 50 20 44 39 ■ Don't know/neither 0 BASE: 1500 Overall Coastal Delta Dry Hilly **Plain**

Figure 12: Preparedness for an extreme weather event

Q: If an extreme weather event or natural disaster happened in your local area, how prepared do you think you would be? Prepared or not prepared?

Researchers asked people what actions they had taken to prepare for an extreme weather event. Seventy-seven per cent of those interviewed had taken at least one action of this type, most of which involved investing time (eg. listening to weather reports, signing up for early warning alerts) rather than resources (eg. making adjustments to home or saving money).

People in different zones of Myanmar had taken, or were taking, different steps to prepare for potential extreme weather events. Overall, communities in the Delta and Plain zones had taken/ were taking the most action, which may have contributed to their higher sense of preparedness.

Feedback from BRACED partners highlighted that people's ability to respond to and prepare for extreme weather events was influenced by where they lived. For example in the Delta zone of Myanmar, people were more regularly affected by floods and had limited escape routes, so were more likely to prepare for extreme weather. However, in Rakhine state in the Coastal zone – which experiences similar weather events – people can seek shelter in hilly regions, so they are less likely to feel the need to prepare for extreme weather.

Table 6: Actions taken/being taken to prepare for extreme weather events (showing top five mentioned, by zone)

	Overall	Coastal	Delta	Dry	Hilly	Plain
Base	1500	170	185	490	290	365
Listen to weather forecasts	84%	77%	89%	87%	65%	93%
Sign up for early warning alerts	55%	38%	60%	65%	28%	66%
Make permanent adjustments to my home	37%	41%	34%	32%	45%	37%
Save money	36%	34%	31%	32%	40%	40%
Store food	34%	30%	40%	29%	45%	31%

BASE: 1500

Q: Here are some more actions people can take to help them deal with extreme weather events. Which of these actions are you currently taking/have already taken?

People who were very poor were most likely to have perceived an increase in extreme weather events such as cyclones and floods in recent years, and consequently were the most worried about an extreme weather event (81% felt worried, compared with 74% overall). However, they had taken, or were taking, the fewest actions to prepare for extreme weather.



Table 7: Actions taken/being taken to prepare for extreme weather events (showing top five mentioned by income)

	Overall	Very poor	Poor	Comfortable/ well-off
Base	1500 ¹⁵	427	716	354
Listen to weather forecasts	84%	73%	86%	92%
Sign up for early warning alerts	55%	43%	55%	68%
Make permanent adjustments to my home	37%	30%	36%	47%
Save money	36%	21%	35%	55%
Store food	34%	30%	32%	44%

BASE: 1500

Q: Here are some more actions people can take to help them deal with extreme weather events. Which of these actions are you currently taking/have already taken?

This vulnerability was highlighted during BBC Media Action's qualitative research. Low-income respondents felt particularly affected by extreme weather events but believed that they lacked the resources to protect themselves and their families.

"We have to be afraid of the monsoon and end of the rainy season. [If there is an emergency situation] rich people will go with their own ways but for us, we can only blame our fate."

(Older male, Delta zone)

"Every year there is flood but not as bad as this year. Because of the flood, farmers have lost everything and daily wagers [wage labourers] have no job to do."

(Older female, Dry zone)

¹⁵ Three respondents answered "don't know" to the question about income levels and are not included in the income columns but are included in the overall column.

ENABLERS AND BARRIERS TO ACTION

This section identifies key factors that enable or prevent action in response to changes in the climate and perceived a decrease in the availability of key resources. This includes people's direct responses to questions about barriers and enablers, as well findings from the rest of the study that identify factors that enable and constrain activity.

People in Myanmar felt that a lack of institutional support was the biggest barrier to responding to changes. The need to survive was the most common response for why people might take action. Other factors that influence levels of activity include being able to access information and understanding the issues, as well as community engagement.

PERCEIVED BARRIERS: LACK OF SUPPORT

The study asked people what they felt were the biggest barriers to taking action. Lack of support and information ranked as primary barriers, while general disengagement or cultural barriers were seen as less of a constraint.

Women were slightly more likely to feel that they faced barriers to action than men. Overall, people in Coastal and Hilly zones had the most perceived barriers, and people in the Delta the fewest.

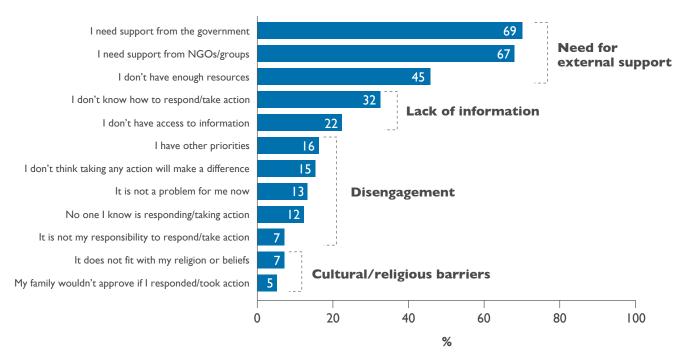


Figure 13: Perceived barriers to taking action (% strongly agree)

Q: I am now going to read some statements. They are reasons why some people do not respond/take action. For each statement I read out, please say whether you agree or disagree with it as a reason for why you would not respond/take action (to changes in the weather or the availability of resources such as food, water and fuel).

COMMUNITIES ARE LOOKING FOR SUPPORT FROM THE GOVERNMENT

When asked about the main barrier to taking action, almost all pointed to the lack of support from the government (91% agreed that they needed more support). This is the highest of any country included in the Climate Asia studies. Across the other seven Climate Asia countries, an average of 75% said that they needed more support from their government. Bangladesh had the second highest levels of agreement with this statement, at 86%.

Qualitative research in Myanmar highlighted a desire for more sustained support from government. Many believed that their government should be doing more to facilitate responses to weather-related risks.

"The chairperson of our township administrative office once came here and told us, 'You have to [respond] yourself. We won't come to rescue you."

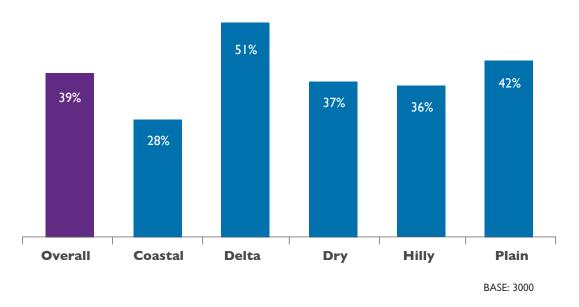
(Young female, Delta zone)

APPETITE FOR MORE HELP FROM NGOS

Alongside the need for support from government, an equal number cited the desire for more support from NGOs (91%). Across Myanmar, 39% were aware of NGOs in their area that provided information on issues such as food security, water safety, fuel and housing, or disaster events such as drought or earthquakes. This was highest in the Delta (51%) and Plain (42%) zones, and lowest in the Coastal (28%) zone. Of those who were aware of NGOs in their area, 76% felt informed about the services they offered.

However, engagement with these services may be limited as almost no respondents mentioned speaking with NGOs about social and environmental changes. Given the desire for external support to help adapt to these challenges, more could be done to highlight the services available to communities.

Figure 14: Awareness of NGOs in the area (% aware)



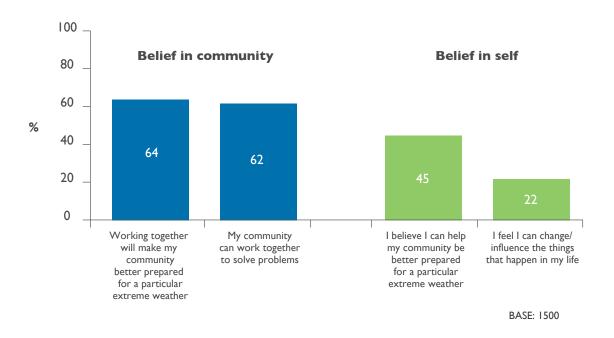
Q: Sometimes non-governmental organisations (NGOs)/groups provide information on social and environmental issues such as food security, water safety, fuel and housing for events like drought or earthquakes. Are you aware of any NGOs/groups like this in your area?

CONFIDENCE IN COLLECTIVE ACTION GREATER THAN IN INDIVIDUAL

People in Myanmar expressed a strong belief that communities could play an important role in helping to improve preparations for extreme weather events. Many also felt confident that their community could act together to tackle problems.

Despite confidence in the potential for community co-operation, people were less self-assured in their individual ability to support their community in making these preparations. Women were less convinced about their potential contribution – only 40% strongly agreed that they could help their community to prepare for extreme weather events, compared with 50% of men. More can be done to build both individual and community efficacy to improve responses.

Figure 15: Perceptions of community and individual ability to take action around extreme weather (% strongly agree)



Q: For each statement I read out [about preparing for extreme weather events], please say whether you agree or disagree with the following statements. Please say if you strongly agree, tend to agree, strongly disagree or tend to disagree.

PEOPLE DISCUSS CLIMATE ISSUES BUT MOSTLY IN INFORMAL SETTINGS

Three-fifths (60%) of people in Myanmar said they often discussed coping with climate changes with people around them. This was one of the highest levels of discussion across the Climate Asia countries (average of 43%).

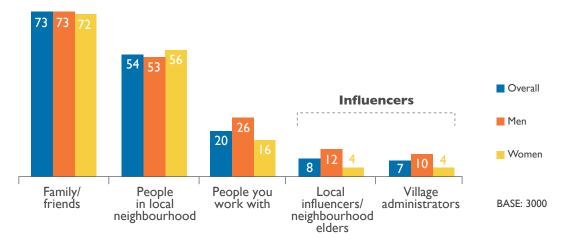
Though respondents were talking about the climate changes they had felt, the majority of these conversations were with family, friends or colleagues. Fewer than one in 10 said that they discussed these challenges in a more formal setting, such as with a local administrator or among neighbourhood elders. Twenty-one per cent said that they did not talk to anyone about these issues.

This lack of engagement with community leaders was also reflected in meeting attendance: only 13% said that they had ever attended a community meeting to discuss how to deal with issues around water, food, energy supplies or weather.

This distance from local leadership in Myanmar is significant. More should be done to bring community concerns to a wider forum, particularly as village leaders can be central to improving community adaptation to, or preparedness for, a weather-related disaster.

Men were more likely than women to engage in discussion about these topics outside of their immediate social group. Those who talked about the issues most could be defined as "opinion formers", typically older men, who are more educated and more engaged with community issues. They talked about the issues more frequently and across a wider range of audiences than other respondents.

Figure 16: Discussions about weather and resource availability changes (showing top five mentioned)



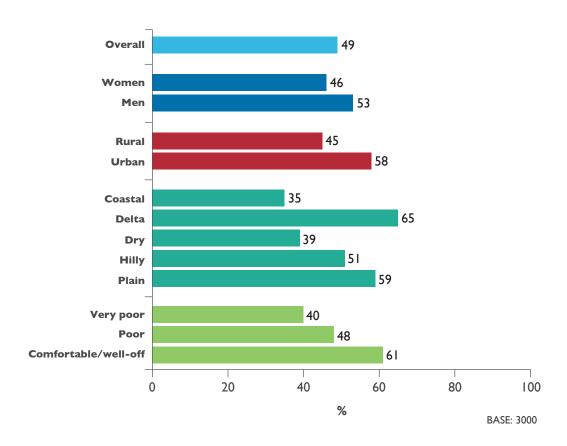
Q: Who do you currently talk to, or who currently talks to you, for advice or information on issues discussed today (water, food, energy, extreme weather)?

INFORMATION CAN HELP PEOPLE TO TAKE ACTION

People in Myanmar highlighted a lack of information as one of the biggest barriers to taking action on issues relating to climate changes, and only half (49%) of them said that they felt informed about changes in the availability of food, water and fuel. This aligns with the average across the other seven Climate Asia studies, of 47%.

In rural areas, people felt that their knowledge on these issues was more limited. There were also notable regional differences: 65% of people living in the Delta zone felt informed, compared with just 35% in the Coastal zone and 39% in the Dry zone. Those who felt informed were more likely to be male and live in urban areas.

Figure 17: Felt informed about how to respond to changes in essential resources



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

Findings suggest that building people's understanding about these changes would help to encourage action. People who felt informed about changes in the weather and the availability of key resources were:

- More likely to think changes have a high impact on their life now and in the future
- More likely to have higher levels of concern about extreme weather events and be taking much more action to prepare
- More willing to make changes to both their livelihoods and lifestyles

This suggests that improved knowledge helps to inform communities about the changes they have experienced, link these to the impacts on their lives and challenge fatalist views that can contribute to inaction.

There is significant scope to improve people's knowledge about climate and environmental changes and ensure that information reaches the people who need it most.

MORE THAN HALF UNAWARE OF ANY COMMUNICATIONS ON CLIMATE CHANGES

When asked about awareness of existing communication or resources related to changes in the weather or environment, two-fifths (43%) stated that they were aware of existing communication, while more than half (57%) were not.

When asked what type of communication they were aware of, people were most likely to mention weather forecasts or warning information, perhaps driven by communication related to the floods that hit the country during the fieldwork period.

People living in flood-affected areas of Myanmar were not more likely to be aware of existing communication on this issue. Respondents in flood-affected areas who could recall recent communication of this type were most likely to mention radio programmes, followed by TV programmes, indicating that radio may be a more effective way to reach affected communities.

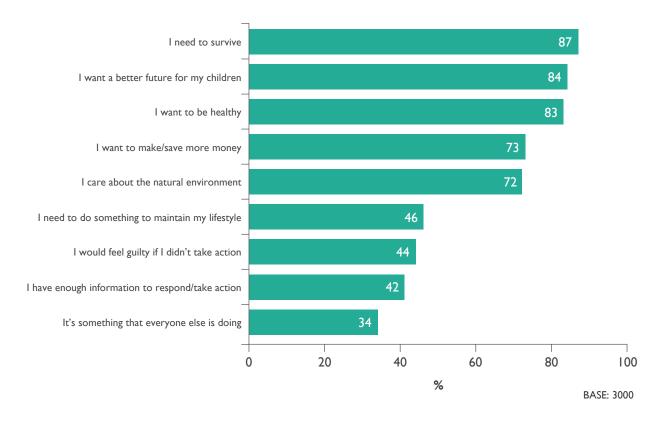
BBC Media Action's qualitative research in Myanmar highlighted the fact that language barriers often limit access to information on the weather. For example, in the Hilly zone, focus group discussions took place in a village where the main language was Lahu. Participants stated that they did not understand Burmese well and tended to listen to Thai radio for weather reports. As a result, the village had limited access to local information on weather.

ECONOMIC SECURITY IS A STRONG DRIVER FOR ACTION

When asked their top reasons for responding to climate changes, the large majority (87%) strongly agreed that they needed to take action to survive. Seventy-three per cent also stated that the ability to make more money was a motivating factor. This highlights the feeling of economic vulnerability in Myanmar, particularly as many (63%) felt that changes in the weather and environment had compromised their ability to earn money.

Together, these findings point to a need to connect weather and environmental changes to people's central concerns around economic stability, in order to prompt people to adapt to potentially damaging climate changes and extreme weather. Communication needs to illustrate how people can improve their resilience, specifically linked to economic security.

Figure 18: Motivators for taking action in response to changes in the weather and environment (% strongly agree)



Q: Some people have given reasons for why they have responded to the impact (of changing weather and availability of food, water and fuel). For each statement I read out, please say whether you agree or disagree with it as a reason for why you would respond/take action.

CASE STUDY: DELTA ZONE

The Climate Asia study demonstrates that communities in the Delta had a significantly different experience of, and attitude towards, living with climate changes and weather extremes than those in other zones of Myanmar.

FEEL INFORMED AND TAKING ACTION

Myanmar's Delta zone is densely populated, mostly comprised of farming and fishing communities. Since 2008's catastrophic cyclone, which disproportionately affected the zone with widespread deaths and devastation, the Delta zone has tried to rebuild under the threat of more extreme weather events.

People in the Delta felt more attuned to changes in the environment and had some of the highest levels of concern around this issue. They were most likely to perceive a high impact from these changes, both now (19%) and in the future (38%). They were also most likely to express worry over these changes, particularly as they had the highest levels of perceived increases in floods (53%) and cyclones (50%) in recent years.

Communities in the Delta were the most informed about changes in the environment (65%) and had the highest awareness of NGOs present in their area (51%). People in the Delta zone were also most likely to say that their community had a disaster response plan in place (28%, compared with 14% overall).

People in the Delta were less likely to see barriers to taking action in response to these challenges, and they demonstrated higher self-confidence in their ability to act. There was also much higher support for community action in the Delta than elsewhere: 88% of respondents in this zone strongly agreed that working together could improve disaster preparedness, compared with 64% overall. Individuals from the Delta zone were also more likely to think that they had a role in addressing these challenges: 65% strongly agreed that they could help their communities to be better prepared for extreme weather events, compared with 45% overall.

These results indicate the potential for communication interventions to help to increase people's understanding of how to respond to changes in climate, building vulnerable communities' abilities to help to prevent or respond to these challenges.

However, more can be done to facilitate this kind of response in the Delta zone. Thirty-five per cent of Delta respondents still felt uninformed about changes in climate and resource availability. In addition, not having enough resources to respond and a lack of government support were perceived as major barriers to action.

THE MEDIA AND COMMUNICATION LANDSCAPE

In order to reach people it is important to understand what they want to know, the media they use, who they talk to and trust, and how they would like information delivered to them. This section analyses media and communication use in Myanmar to assist this process.

MEDIA USE IN MYANMAR

Across Myanmar, TV sets¹⁶ were the most commonly accessed media platform overall and the second most accessed in respondents' households. Mobile phone use in Myanmar has increased significantly in recent years due to the reduction of SIM card prices. The Climate Asia Myanmar results show that mobile phones are now the most commonly accessed media platform in households. A BBC Media Action study carried out in 2013¹⁷ found that only 12% of respondents in Myanmar had access to mobile phones at home. In this 2015 study, this result increased to almost three-quarters (73%).

 Access elsewhere 93% 91% Access at home 84% 18% 33% BASE: 3000 30% 56% 53% 42% 36% 73% 39% 35% 12% 60% 54% 15% 30% 21% 18% 17% TV set Mobile Radio Newspaper Satellite Internet Radio on phone dish for mobile phone

Figure 19: Access to media platforms

Q: Which of the following items can you access or use in your house?

Q: Which of the following items can you access elsewhere? (Asked only among those who do not have access to the media platform in their own homes)

¹⁶ TV sets include sets with channels and without channels, such as DVD players or laptops which play DVDs.

¹⁷ BBC Media Action (2013) Myanmar Media and Information Needs (internal report).

There was an urban/rural divide in access to media platforms: urban audiences reported much higher access to all the main media platforms, while rural communities were more reliant on radio sets as they had significantly less access to TV or the internet.

89% 88% Urban Rural 65% 59% BASE: 3000 51% 47% 42% 32% 27% 20% 15% 10% TV set **Satellite** Mobile **Radio** Internet Radio on Newspaper phone set mobile dish for phone

Figure 20: Access to media platforms at home (by urban and rural locations)

Q: Which of the following items can you access or use in your house?

TV: KEY FOR ENGAGING URBAN AUDIENCES

TV sets were the most used media source, particularly for urban households. Among urban respondents nine in 10 (89%) had a TV set at home and most (83%) watched it daily.

Among all TV watchers, state-owned MRTV was the most watched channel – 84% had watched it in the past year, followed by MRTV 4 (71%) and Myawaddy (64%).

TV viewers were most likely to watch TV in the evening, with 61% usually watching from 7–8pm and 55% watching from 8–9pm.

MOBILE PHONES: IMPORTANT PLATFORM FOR YOUNGER AUDIENCES

The surge in mobile phone ownership in Myanmar is more concentrated among younger audiences: 80% of 15–24-year-olds said that they had access to one at home, falling to just over half (56%) of those aged 65 years and older.

80% 75% 73% 70% 65% 56% 56% Share 25–34 years 35–44 years 45–54 years 55–64 years 65+ years BASE: 3000

Figure 21: Access to mobile phones in household

Q: Can you access or use a mobile phone/cellphone in your household?

Most said that they used mobile phones for traditional functions such as making calls, rather than more advanced services. This is likely because most respondents had access to traditional mobile phones rather than smartphones.

Among people who had used phones in the past 12 months, younger respondents (15–24-year-olds) spent more time on them and used them for a wider range of activities including listening to music or the radio (49%), social networking online (41%), taking photos (25%), or playing games (20%). As age increased, the range of mobile phone uses became more restricted, with older audiences more likely to use their mobiles just for making calls.

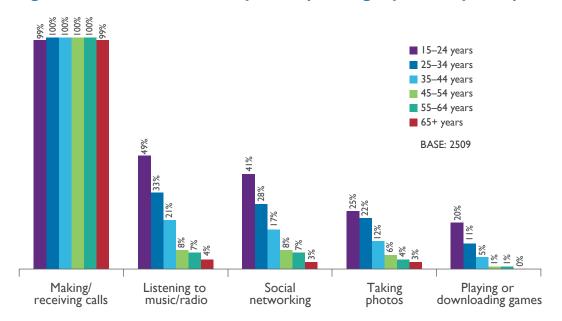


Figure 22: Main use of mobile phones (showing top five responses)

Q: What is/are the main reason/s for you using a mobile phone? (Asked among those who have used a mobile phone in the past 12 months)

RADIO: PRIMARY PLATFORM FOR RURAL AUDIENCES

Though radio was the third most accessed media platform in Myanmar, it remained the most important platform for connecting with rural and older audiences. Sixty-five per cent of respondents aged over 55 tuned in daily, dropping to 48% of 15–24-year-olds.

Myanmar Radio was the most listened-to station, particularly in rural locations – 85% of rural radio users had listened to the channel in the past 12 months. Shwe FM and Padamyar FM were the next most listened-to channels. There were clear spikes in radio listening in the morning, early afternoon and evening. The most popular time slot was 7–9pm, followed by 6–8am.

INTERNET: POPULAR WITH YOUNGER, URBAN AUDIENCES

Internet penetration in Myanmar remained more concentrated in urban locations, where 51% of people had online access, compared with 20% of rural communities. People with internet access used it regularly: 70% of those with access to the internet were online daily, mainly for social networking and keeping up-to-date with current affairs.

Younger users aged 15–24 were more likely to spend longer online. Half (52%) spent less than 30 minutes online each day but 18% of young daily internet users surfed for 1–3 hours a day. The primary draw for younger users was social networking. Older internet users (aged 45+) spent less time online and were more likely to use it to keep up-to-date with current affairs.

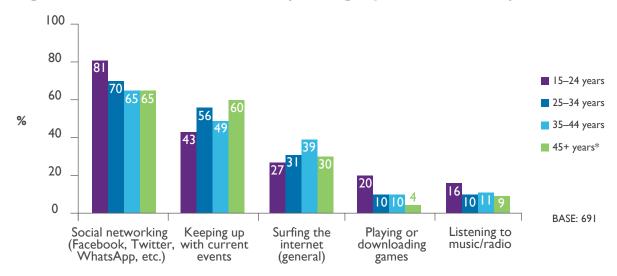


Figure 23: Main use of the internet (showing top five uses overall)

Q: What is/are the main reason/s for you using the internet? (Asked among those who have used the internet in the past 12 months.) *Ages 45 and upwards have been grouped due to low base sizes.

NEWS AND DRAMA ARE THE MOST POPULAR MEDIA CONTENT

When asked about the types of programmes they consumed most across all media platforms, three-quarters (77%) of respondents in Myanmar said that they watched or listened to the news, followed by drama formats (51%), religious programming (47%) and reality-based programmes (44%). Men had higher engagement with news and panel/discussion programmes, while women were more likely to view/listen to dramas and reality shows.

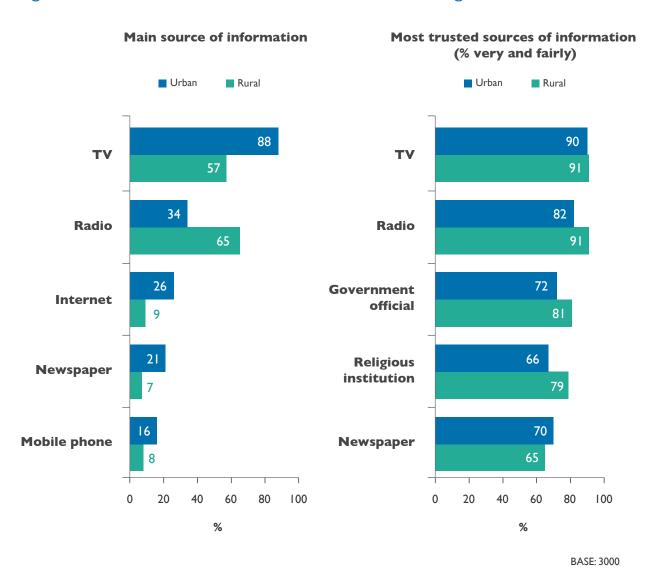
Younger audiences were less likely to cite watching or listening to news or religious programming and were more likely than older audiences to engage with drama, game shows, reality programmes and lifestyle programming.

MAIN INFORMATION SOURCES FOR ENVIRONMENTAL ISSUES: TV AND RADIO

When asked where they obtained information about social and environmental issues, people in Myanmar cited TV as the most common platform, particularly in urban areas and among younger audiences. Radio was central in rural areas – 65% listed this as a key source, compared with only 34% in urban areas.

TV and radio were both trusted sources of information on social and environmental topics. Religious institutions ranked as one of the most trusted sources. In flood-affected areas, 89% of participants highlighted religious institutions as a trusted source, compared with 74% of people in areas not affected by floods.

Figure 24: Sources of information on environmental changes



Q: What are your main sources of information for the social and environmental issues discussed today? Q: How trustworthy do you find these sources, as a general source of information on issues we have been discussing (water, food, energy, extreme weather)? Very, fairly, not very much or not at all?

HOW MEDIA AND COMMUNICATION CAN ENABLE ACTION

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

Ultimately, BBC Media Action believes that communication can contribute to people's ability to improve their economic opportunities, reduce the risk of disasters and cope with crises. To be most effective, communication must take into account the diverse needs of different groups of people.

Drawing on Climate Asia research findings, the following section outlines recommendations for how the media and communication in Myanmar can support audiences, communities and institutions to meet these challenges.

AUDIENCES

Inform people

Increasing awareness of an issue and convincing people that something needs to be done is often the first communication step. The research shows that in Myanmar, while awareness of the term "climate change" was high, few felt confident in their knowledge of why changes to climate and weather were taking place.

Almost half of those interviewed (49%) did not feel informed about changes to the weather and environment. Perceived knowledge was lowest in the Coastal and Dry zones, despite these areas experiencing high levels of change. Communication could be used to engage vulnerable groups, such as women and rural audiences who have less access to information.

Connect changes in the environment to central concerns

Many said they felt that the impact of weather and environmental changes in their everyday lives, particularly on their income and health. Linking communication on changes in the environment to the things that people are most concerned about — protecting their family income and health from extreme weather events — can help to underline the importance of individuals taking action now.

Improve the quality of information

People's awareness of existing communication about changes to the climate on radio and TV was mostly restricted to weather forecasts, rather than programmes providing information on how to adapt (such as addressing agricultural productivity). More can be done to improve the quality of programming in Myanmar and to provide more forward-looking information.

Encourage a belief that people can do something

This study identified a tendency to believe that changes in the environment were outside respondents' sphere of influence, leading some people to feel powerless to take action and encouraging a fatalistic approach to environmental risks and impacts. Increasing confidence in an individual's ability to act, and fostering the belief that they can make a difference to their everyday lives, could act as a catalyst to change. This could be done by role-modelling examples of individual or household actions taken in response to these challenges.

Show low-cost solutions

People in Myanmar felt that a lack of resources was a key barrier to action in response to weather and environmental changes. Very poor communities were taking the least action to adapt to, or prepare for, these challenges. These audiences need suggestions for measures they can take despite their lack of resources.

Providing examples of simple, affordable solutions could illustrate how individuals can take action in Myanmar. For example, in preparing for extreme weather events, very poor respondents were more likely to do things like save food, rather than attempt longer-term solutions such as making permanent adjustments to their homes. Alongside this, communication initiatives could partner with on-the-ground interventions to ensure that people receive support for more costly actions.

Localise national communication

Radio is the most important platform for reaching communities affected by climate change in Myanmar, as most rural people rely on this as their primary source of information and entertainment. Previous experience of extreme weather events in the country means that people know to tune into weather forecasts to gain information on weather changes.

However, language barriers in Myanmar can mean that important information does not reach, or is not understood by, communities that speak minority languages only.¹⁸ Collaboration between national and local media networks could help to make national strategies relevant in the country's geographically diverse areas and also translate messages to overcome language and comprehension barriers.

COMMUNITIES

Encourage community co-operation

In Myanmar, people felt that communities could act to improve adaptation and resilience to weather and environmental changes. Collective action was higher in some areas, such as the Delta zone where working together has helped communities to feel more prepared for extreme weather events. Encouraging people to solve problems as a community rather than on their own could help to improve climate change resilience in Myanmar, and potentially overcome the challenge of limited individual resources. More can also be done to show how people of different ages, genders and income levels can be involved in, and support, community action to reduce the impact of climate changes.

Promote discussion among community members

Enabling people to respond to climate-related challenges requires increasing their engagement by facilitating community discussions. 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.

In Myanmar, people are talking about these changes in the community but only a small number have brought this to wider local forums.

¹⁸ This was shown in results from BBC Media Action qualitative research in Myanmar. Due to low base sizes of non-Bamar speaking audiences in the quantitative research, more evidence on language barriers is needed from future research.

Engage influential community members

In Myanmar, leaders of local institutions such as community groups or religious groups are often mentioned as trusted sources of information on a wide range of issues. Communicating with these groups may increase the likelihood that information is accepted and shared within communities.

INSTITUTIONS

Amplify success of NGOs and local interventions

NGO initiatives were making a difference in some areas of Myanmar, such as the Delta zone, where sustained interventions have improved preparedness for extreme weather events. There may be a role for media and communication to amplify the success of these projects and highlight the benefits of taking action.

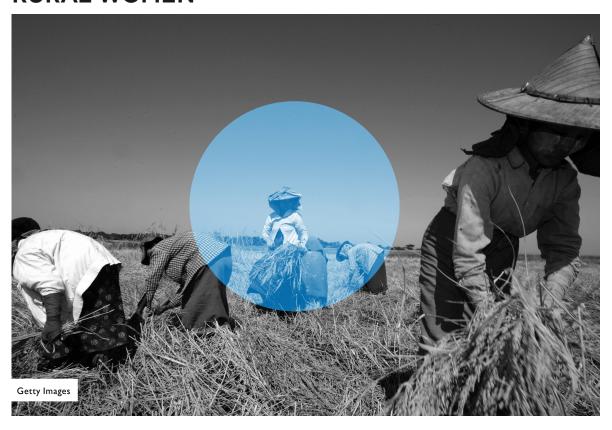
Facilitate access to external support

The majority of people in Myanmar pointed to a lack of support from institutions such as the government and NGOs as a barrier to taking action. Communication could highlight how and where communities can get support by connecting them with local government institutions and NGOs operating in their area, as well as outlining what individuals can do themselves. This could help to support dialogue between audiences and governments and provide a space for institutions to be held accountable. If people are more informed about why climate change is happening (human behaviour) as well as what is being done to address this, they will be better positioned to hold leaders to account.

REACHING PRIORITY AUDIENCES

Different audiences in Myanmar have diverse communication needs. This section outlines examples of audiences from across the surveyed zones to show how this research can help to shape effective communication.

RURAL WOMEN



WHO ARE THEY?

Rural women made up over a third of the people included in this study. Of the rural women interviewed, 31% were housewives and 27% were farmers or agricultural workers. Overall, these women were less educated than rural male respondents and had limited resources, with 84% classed as low income (very poor or poor).

WHY PRIORITISE THEM?

A key focus for the BRACED project has been empowering women (and children) to increase their knowledge of, and preparedness for, climate changes and weather extremes. The need for more gender-sensitive resilience-building was clear in the aftermath of Cyclone Nargis – women were disproportionately affected by the disaster, both in terms of loss of life (almost twice as many women as men died in the cyclone) and the burden of post-cyclone reconstruction (women often had less income and fewer resources).

The research shows that rural women had similar views to rural men in terms of awareness of changes in the environment and perception of impacts from changes now and in the future. They also had similar feelings as rural men regarding unpreparedness for extreme weather events and perceived barriers, which stop them from taking action to address climatic and environmental challenges. Rural women were taking similar levels of action relating to livelihoods: 20% of rural women had made changes, compared with 24% of rural men.

Less involved in community decision-making and lower selfbelief to take action

Though rural men and women were alike in their perceptions and experiences, the main difference between them resilience-wise was their involvement in community decision-making and their perceptions about their own abilities to take action.

The Climate Asia study and wider qualitative research in Myanmar show that rural women are less involved in community actions: 53% of rural women felt involved in local decision-making, compared with 68% of rural men. The qualitative research highlighted that rural women often require men's permission to attend community meetings, and rely on male household members for information about community decisions around taking action.

As highlighted in Section 4, women were less likely to feel that they could support their community in taking action on climate-related issues. Forty-two per cent of rural women strongly agreed that they could help their community to prepare for an extreme weather event, compared with 53% of rural men. This is an important issue to address, given that collaborative action is key to improving resilience for all community members.

Though many (56%) rural women discussed climate changes, they were less likely to be talking about them than rural men (61%). Discussions among rural women tended to be within their immediate circle of family and friends and few had discussed issues in a wider forum or with community influencers.

INFORMATION SOURCES

Rural women in Myanmar were less likely to be aware of existing communication about changes to the weather (37%, compared with 43% overall) and the majority (55%) felt uninformed about what they could do.

Overall, rural women had less access to the media than other people in the country. Sixty-three per cent had access to a mobile phone in their own home and 56% had access to a radio set at home.

Radio was cited by 62% of rural women as their main source of information on changes in the weather and environment. Among rural women with access to the radio, 59% listened on a daily basis, while only 48% used a mobile phone on a daily basis. Myanmar Radio was the most popular radio channel, followed by Shwe FM and Padamyar FM. Rural women were most likely to listen in the mornings from 6–8am and early in the evening (7–8pm).

REACHING THIS AUDIENCE

Targeted communication could highlight how rural women can take action and help to build their family's or community's resilience to climate change. This group was most likely to engage with news and drama, programming that could model how taking action now could improve current and future outcomes.

Rural women were very likely to say that their religious beliefs were very important to them (95% strongly agreed) and are therefore more likely to respond to communication that aligns actions and preparations with their religious values.

Communication could also highlight the importance of female action to rural men. As primary decision-makers for many families, men's understanding of the potential role of female household members is also important to enable overall household and community action on climate issues.

FARMERS



WHO ARE THEY?

Farmers¹⁹ made up more than a quarter of the interviewees in this study. The majority of farmers were male (64%), although women (36%) also comprised a significant proportion of this group. Among respondents in this study, there was a higher concentration of farmers living in the Dry (40%) and Hilly (30%) zones.

WHY PRIORITISE THEM?

Feeling the impact on incomes

As highlighted in previous sections, people who rely on the land for income are particularly vulnerable to changes in climate and many are struggling to adapt to these changes. A third (33%) of farmers felt that agricultural production had decreased in recent years. A quarter of farmers (23%) felt that their household income had decreased in the previous five years as a result of climate changes.

 $^{^{\}rm 19}\, {\rm Defined}$ in the study as "agricultural labourer/farmer".

07

The two zones with the highest proportion of farmers were the Hilly and Dry zones, both of which experienced different challenges.²⁰

Farmers in the Dry zone were the most likely to say that changes in the environment had a high impact on their ability to earn money (75%). In response, farmers here had taken a wide range of actions to address agricultural shortages, such as rotating crops, using pesticides and fertiliser to improve soil fertility – higher here than in other zones. Farmers here were most likely to highlight a lack of resources (91%) as a key barrier to taking action. The research also showed that farmers in this zone were least willing to make further changes to their livelihoods (68% were unwilling compared with 58% of farmers overall).

In the Hilly zone, farmers had observed high levels of change in both the environment and access to key resources, such as fuel. Almost a third (31%) stated that they had made some changes to their job or livelihood – the highest of all farmers (25% overall). Despite the high level of adaptation, farmers here were the least likely to feel that they could change or influence aspects of their lives. The key barriers to taking action were not only lack of support and resources but also lack of information: 71% stated that they did not have access to information to respond, compared with 61% of all farmers. In addition, farmers in the Hilly zone were less likely to see the benefit of community action. They were least likely to feel involved in community decision-making (56% compared with 65% of all farmers) and fewer believed that their community could work together to solve problems.

INFORMATION SOURCES

Farmers' main source of information on changes in the weather and environment was the radio (67%, compared with 55% overall), and 61% had a radio set in their homes. Many (62%) had a mobile phone in their household, which half of them (53%) used daily. Forty-two per cent had a TV set in their homes.

Myanmar radio (82%) and Shwe FM (48%) were the most popular channels among farmers, who mostly tuned in from 6–8am, and 7–9pm. After the news (77%), farmers were most likely to watch religious programming (49%).

REACHING THIS AUDIENCE

Farmers in different zones of Myanmar have diverse needs. However, communication could outline the different challenges they face across the country and offer solutions to safeguard their lives and livelihoods.

 $^{^{20}}$ More in-depth research should be conducted among this audience to fully capture regional differences between farmers.

Farmers need to know where they can get support, as they had some of the lowest levels of knowledge about changes to weather and the environment. Only 34% were aware of existing communication on these issues (compared with 43% nationwide) and they were less aware of NGOs operating in their area. Connecting farmers with organisations that could help to support further action is vital to addressing this knowledge gap.

Communication could demonstrate agricultural solutions to climate-related challenges. Many farmers were taking action to address these problems but would benefit from new, ideally low-cost, solutions. For example, farmers in the Coastal and Delta zones, where activity was lower, may benefit from learning how others have adapted to agricultural changes.

Overall, farmers were more likely than other groups to be involved in community decision-making – 65% felt that they had high involvement in the community. However, just over a third (36%) said that they had worked with their local community to share resources or tackle the issue together. Communication could highlight how villagers can work together to implement more sustainable preparations and responses to climate change.

COASTAL COMMUNITIES



WHO ARE THEY?

The Coastal zone in this study is comprised of Mon, Tanintharyi and Rakhine states. Three-quarters (76%) of respondents in the Coastal zone live in rural locations, with 49% classed as very poor and 40% as poor. This area is regularly exposed to extreme weather events such as flooding and cyclones.

WHY CHOOSE THEM?

Basic concerns about access to affordable food

Thirty-eight per cent of Coastal respondents stated that agricultural production in their zone has decreased, compared with a national average of 28%. Here, people were most likely to say that access to affordable food had reduced (28%, compared with 14% overall across the country).

Many feel worried but face barriers to taking action

When asked about natural disasters and extreme weather events, Coastal communities expressed high concern (82% were worried about an extreme weather event). However, despite the prevalence of extreme weather events such as flooding and cyclones in the area, fewer Coastal respondents than the national average were making preparations for extreme weather events.

When asked about what might stop them from taking action to climate-related challenges, respondents in the Coastal zone cited many more barriers than other zones of Myanmar. Their biggest perceived barrier was the need for more support from the government (80% strongly agreed) and NGOs (77% strongly agreed). After this, they pointed to a lack of information and were the group most likely to state that they did not know how to respond or take action (77% agreed).

INFORMATION SOURCES

Coastal communities were the least likely to feel informed about how to act in response to weather and environmental changes – 35% in this zone felt informed, compared with 49% overall. Similarly, Coastal people had the lowest awareness of NGOs in their area (28%, compared with 39% overall).

Although 39% of Coastal communities had discussed these issues with someone else, 42% said that they had never discussed changes in the environment – a significantly higher proportion than the national average of 19%.

After TV and radio, people in the Coastal zone were much more likely to prefer getting information from members of their own community than other zones – 29% looked to local networks, compared with 15% overall. When asked about trusted sources, religious institutions (83%) and community centres (64%) stood out as particularly trusted among Coastal respondents compared with other zones, after traditional media platforms.

REACHING THIS AUDIENCE

Radio and local community networks are the best way of reaching the Coastal communities that are experiencing high levels of change but not taking action.

Targeted communication should highlight the community's exposure to risk to extreme weather and demonstrate the importance of, and how to prepare for, such events.

Given the low levels of resources available to people in Myanmar's Coastal zone, solutions highlighted in the media need to be low-cost and achievable to help them to take action.

WHAT NEXT?

This report and all Climate Asia data and tools are available on a fully searchable Climate Asia data portal, dataportal.bbcmediaaction.org. BBC Media Action believes that these resources can improve communication and decision-making by allowing stakeholders to better understand their audiences' needs.

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

SHARING OUR FINDINGS AND TOOLS

BBC Media Action invites people to share this report, the links to the data portal (dataportal.bbcmediaaction.org), the climate change toolkit and its research tools as widely as possible. BBC Media Action will also work with stakeholders and partners to help them to use this evidence and analysis. BBC Media Action hopes and believes that the more people who use the Climate Asia findings and tools, 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. The research can be built on. For instance, people can use Climate Asia research tools to conduct their own surveys. This will enable tracking of key indicators over time, which will enrich 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 most need it.

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