

UNDERSTANDING PUBLIC PERCEPTIONS OF CLIMATE CHANGE IN CAMBODIA

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FOREWORD

Climate change is no longer a myth. It is happening and all of us in Cambodia are particularly vulnerable to its worst possible effects due to our limited adaptive capacity. Addressing climate change has been emerging as a priority of the Royal Government of Cambodia, as evidenced in the National Strategic Development Plan Update 2009-2013.

Experience around the world has shown that raising awareness about climate change is challenging. Especially in poorer countries like Cambodia, competing priorities can be a hurdle to creating a healthy sense of urgency among the public.

Since 1995, when we ratified the United Nations Framework Convention on Climate Change (UNFCCC), we have been racing to address climate change: our National Adaptation Program of Action (NAPA) to climate change was among the first to be approved worldwide, and we are about to complete our Second National Communication to the UNFCCC. The National Climate Change Committee (NCCC) has been established as the climate change policy making body with Samdech Akka Moha Sena Padei Techo Hun Sen, Prime Minister of the Kingdom of Cambodia, serving as its Honorary Chair. The Climate Change Department hosted by the Ministry of Environment and serving as the NCCC Secretariat has progressed in coordinating the range of policies and programmes that are necessary to firmly respond to the negative impacts of climate change while embracing the opportunities it may provide.

The report you are about to read reveals, however, that our collective knowledge and understanding about its basic science, its causes and impacts are still limited.

We believe the stage is now set for a concerted enterprise to guarantee that all Cambodians have access to reliable information about climate change. And we know the information to be conveyed needs to be understandable and relevant but also delivered with a sense of purpose.

It is with this in mind and the commitment to bring ordinary Cambodians back to the centre of our actions and dialogue about climate change that we embarked on this journey throughout the country. We worked with the BBC World Service Trust (the Trust) and benefited from the support of Oxfam, DANIDA and the UNDP. The Trust study team travelled to our twenty-four provinces and spoke to men and women from farming and fishing communities, teachers, business people, housewives, village chiefs and government officials. They asked communities and authorities about their experiences with the changing weather in the past year and as far as they could remember. They inquired about their knowledge and the associations they made when hearing different terms used to

describe climate change. The Trust team also noted who and what most people trusted and relied upon to make informed decisions about issues that affect their lives.

The result of this journey is now in your hands.

Our study *Understanding Public Perceptions of Climate Change in Cambodia* is the very first national effort of this kind. The data collected are immensely rich. The analytical work that has gone into it is thorough. But most importantly, it is the wide range of practical and creative recommendations for national and local awareness initiatives, using a combination of mass media and outreach, which we hope will capture your imagination.

If your organization or ministry is responding to climate change and wishes to increase the knowledge of the people it serves, this report will give you valuable insights and a baseline to assess the effectiveness of your action. If you are a media or advertisement practitioner this study will help you develop more targeted content for a successful information campaign. If you are a curious reader, I sincerely hope the wisdom of our people and the testimonies collected will inspire you as much as they have inspired us.

Finally, I hope the follow-up actions to this study will help build a Cambodian society better equipped to adapt to the impacts of climate change and to participate in the collective mitigation efforts.

Phnom Penh, January 2011

Senior Minister, Minister of Environment

Dr. Mok Mareth

Executive Summary

In 2010, the BBC World Service Trust's Research and Learning Group, on behalf of the Cambodian Ministry of Environment, conducted research in all 24 provinces of Cambodia to explore public perceptions of climate change. The research consisted of a nationally representative survey of 2401 Cambodians and in-depth interviews with 101 key informants from media, industry, national and provincial governments, non-governmental organizations, celebrities, and local leaders including commune council leaders, village chiefs and elders, and religious leaders.

Cambodians believe that their weather is changing,¹ yet the findings suggest some important gaps in people's understanding of what has caused the weather to change.

Almost everyone recognises at least one of the terms 'climate change' and 'global warming'. Broadcast media and word-of-mouth are the sources of both terms for most people. Yet climate change terminology appears to be poorly understood by most survey respondents and by the key informants interviewed for the research. Most respondents associate the terms 'climate change' and 'global warming' with local deforestation, disease, and an increase in temperature.

Most people connect the changes in weather they have experienced to deforestation in Cambodia. 67% of survey respondents think deforestation within Cambodia causes the weather patterns to change and all key informants make a link between climate change and deforestation. Deforestation is also a concern for key informants, for whom trees are understood to play a role in bringing rain, maintaining groundwater supplies, and protecting people and property from storms and flooding.

There is a stronger focus on the impacts of weather change than on the causes. Cambodians say that their weather and environment are changing and that people are feeling the effects. They think that extreme weather events are more frequent and more intense than they once were, and that temperatures have increased. Most people associate weather changes with disease, farming difficulties, drought, increasing temperatures, decreased yields and water shortages. Almost everyone says their work is affected by the changing weather, and most say they lack the water they need for their work.

All key informants say they have observed weather changes over the course of their lifetimes. These include less predictable seasons, diminished rainfall, hotter temperatures, more storms, more frequent and severe flooding and more frequent thunder and lightning.

Most have an experiential understanding of the phenomenon, but do not understand the scientific basis for global climate change. Only a few connect weather changes to pollution from industry or motor vehicle use, and the comments of

¹ The findings indicate that few respondents understand the scientific basis for climate change. However, responses to a number of questions on the survey suggest that people have observed weather changes over their lifetimes, and most Cambodian key informants interviewed for the research say that the weather has changed. In addition, one term in Khmer translates both 'climate' and 'weather', which makes it difficult to identify which of the terms a respondent is using. For these reasons, throughout the report we use the term 'weather' unless we are certain that respondents are referring to the term 'climate'.

key informants indicate some important misconceptions in the ways in which these factors are understood. When prompted, 72% of survey respondents agree that human activities are causing weather patterns around the world to change over time. One third (33%) of people say that their *own* actions contribute to climate change.

Most key informants connect climate change to localized pollution from industry, motor vehicles and other machinery; the use of chemicals, particularly fertilisers; and the production of smoke, particularly from cars and other motor vehicles. Only some key informants, mostly national government and NGO representatives, make direct links between the causes and effects of climate change.

People are uncertain whether the changes they have experienced in their everyday lives are long-term. Of those people who know the term 'climate change', 98% say that climate change is affecting their country now, and 75%, that climate change will affect Cambodia in the future. Yet 22% say that they do not know whether Cambodia will feel the impacts of climate change in the future. This uncertainty could have implications for the coping strategies that people devise to address the impacts of weather changes on their lives and livelihoods.

Although many key informants are concerned about the potential impacts of climate change in Cambodia, most think that the country is not yet as badly affected as other countries. Even among those with a limited understanding of the concept of climate change, there is a feeling that Cambodia will eventually experience its impacts, as other countries have done already.

Many say they do not have the information they need to respond. A quarter of people say they do not know how they can respond to the changing weather, while suggestions for responses focus on short-term measures. More than half of people think they are unable to respond to the changing weather (59%) and do not have the information they need to respond (52%). The three most important barriers to responding identified by the Cambodians surveyed are a lack of money, lack of tools and a lack of information. More women, rural Cambodians, poorer people and those with the least education say they lack the information they need to respond. The comments of village chiefs and commune council leaders reflect these findings.

The dissemination of timely, relevant information will be central to enabling people to respond to the changing weather. Almost all Cambodians (93%) experienced at least one extreme weather event in the year preceding the survey and yet a third did not receive any information about it. Of those who did receive information, most received it during the event or after it had taken place.

More than 8 in 10 Cambodians are media consumers and broadcast media are among the most trusted sources of information. Most watch the TV and listen to the radio, and nearly everyone has access to a mobile phone.

Climate change receives relatively little attention from the Cambodian media and is largely treated as an environmental issue, say key informants. All media representatives interviewed agree that there is a need to approach climate change

stories from new angles, give journalists training on the subject and provide guidance on how to approach the topic.

Cambodians look to the government, the Prime Minister and NGOs to provide leadership in responding to their changing weather. Yet a current lack of awareness among the public of any individual or organization working to respond to the problem suggests they do not know of existing national and local programmes to respond to climate change. The comments of key informants suggest that those best placed to inform their communities about the issue – village chiefs, commune council leaders, and religious figures – are not as well informed about the issue as those in national government. Provincial governors could play a key role, as the provincial governors who participated in the research make the most diverse range of connections between climate change and other aspects of society of all key informants interviewed.

Many Cambodians are therefore making decisions about how they respond without receiving information or support from any source outside their immediate communities. Strong coordination of climate change programming and information provision, from national government to village level, will bring benefits to populations currently struggling to respond.

Background to the Research

Climate change is one of the most important issues on the global political and economic agenda. The poorest people are most vulnerable to the impacts of climate change, as a result of a combination of economic, physical and social factors. Their response to climate change is hampered by a lack of relevant, useful information and, too often, their voices have been absent from the international climate change debate.

In this context, the Cambodian Climate Change Department of the Royal Government of Cambodia's Ministry of Environment, with support from Danida, Oxfam and the UNDP, commissioned the Research and Learning Group at the BBC World Service Trust to conduct a nationwide study to explore knowledge, attitudes and practices in relation to climate change.

The objectives of the study were:

1. To explore Cambodian knowledge and perceptions of climate change.
2. To identify the ways in which Cambodians explain the causes of their changing weather, and the impact that such changes have on their lives.
3. To investigate the barriers to responding to climate change among individuals and communities and within local, provincial and national government.
4. To assess respondents' media consumption patterns and preferences.
5. To inform recommendations on the best methods of communicating to the Cambodian public on climate change.

The study has gathered and documented experiences across the country related to people's perceptions of changes in climate, environment, and natural resources. The report draws on these findings to provide recommendations for raising public awareness about climate change in Cambodia and engaging policymakers and the general public in local, national, and international dialogue and actions related to climate change.

Perceptions and coverage of climate change: what do we already know?

To communicate effectively about climate change, it is essential to know how people understand it and to explore the ways in which they are receiving information on the subject.

Research in the United States has shown that a limited understanding of climate change can restrict people's ability to distinguish between effective and ineffective response

strategies.² Similarly, a lack of appropriate information regarding climate change is seen as a critical barrier in dealing with its effects on livelihoods in sub-Saharan Africa.^{3,4} However, the public perception of climate change is still a relatively new topic for research, and has been limited by a number of factors. In this respect, the Cambodian context is no different.

First, too little has been done to explore people's understanding of climate change terminology. Research in more than ten African countries has found that considerable numbers of people do not recognise the term 'climate change'.^{5,6} This makes it difficult to draw conclusions from many of the international and national opinion polls conducted on the issue.

In Cambodia, a lack of clarity on the ways in which terms such as 'climate change' and 'global warming' are understood by the public makes it difficult to interpret many findings on the public understanding of climate change. Further, until now, there has not been a nationally representative approach to studying the question.⁷ While research into people's perceptions of climate change has been carried out in Cambodia, it has been in the form of small-scale studies, many of which contain an urban sampling bias.

However, we can draw some useful conclusions from the existing research. To support the creation of the Cambodia National Adaptation Programme of Action to Climate Change (NAPA),⁸ participants from 684 households were surveyed in 17 provinces. The research found that although people are keenly aware of the hazards posed by drought, floods, and water shortages, their capacity to adapt is limited, hampered by a lack of social capital and financial resources. The study indicates that the few adaptation methods that people currently employ will not be sufficient to cope with the challenge posed by climate change. The NAPA states, 'people may be used to yearly losses of lives, damages to property and agricultural fields, but a habit of acceptance does not imply successful adaptation'.

The terminology gap

Much of the current research into the public understanding of climate change in Cambodia is restricted by a gap between the general public's understanding of climate change terminology and the technical expertise of researchers and government officials.

Insufficient work has been done to explore the ways in which people understand climate change terminology, leaving room for misinterpretation of research data.

By not taking into account the fact that people's responses are shaped by their interpretation of 'climate change' and 'global warming', the considerable differences between the understanding of a typical government official and a typical farmer can be frequently unaccounted for in the research.

² *Climate Change in the American Mind*, A Leiserowitz et al, Centre for Climate Change Communication, George Mason University, 2009

³ *Micro-Level Analysis of Farmers' Adaptation to Climate Change in Southern Africa*, Nhemachena, C., and R. Hassan, IFPRI Discussion Paper No. 714, Washington, DC: International Food Policy Research Institute, 2007.

⁴ *The Perception of and Adaptation to Climate Change in Africa*, David J Maddison, World Bank Policy Research Working Paper no. 4038, 2007

⁵ *Africa Talks Climate*, BBC World Service Trust, 2010

⁶ *Blowing hot or cold?: South African attitudes to climate change*, J. Seager, 2008, HSRC Review, South Africa

⁷ The study detailed in the *National Adaptation Programme of Action to Climate Change*, Cambodia Ministry of Environment, Phnom Penh, Cambodia, (2006), the most extensive research on the subject to have been carried out until now, surveyed 684 households in 17 provinces of the country.

⁸ *National Adaptation Programme of Action to Climate Change*, Cambodia Ministry of Environment, Phnom Penh, Cambodia, 2006

Findings from several studies^{9, 10} suggest a generally low level of awareness of the specific causes and impacts of climate change. The same studies indicate that Cambodian respondents understand the term 'climate change'¹¹ in the context of *localized* changes in weather, rather than global climate change, and attribute these to localized deforestation. These findings are reflected in a 2004 study carried out in the UK,¹² and by a 2010 study on the public understanding of climate change in 10 countries in Africa.¹³

Most of the Cambodian research finds that people believe that the weather is changing, and two studies^{14, 15} find that most people think they will be affected by climate change. Indochina's i-Trak survey identifies a popular connection between the term 'climate change' and health,¹⁶ while another study¹⁷ indicates concern among farmers about changes in rain patterns, decreased rainfall, drought, diminished agricultural yields and shortages of water for agricultural purposes.

The results of a small-scale survey¹⁸ carried out among callers to the Cambodian Centre for Independent Media (CCIM)'s *Earth Talk* radio programme suggest that young educated Cambodians are interested in issues such as illegal logging and dumping and want more information on similar issues.

Projects such as the CCIM radio phone-in programme point to the role that media has to play in raising awareness and providing information on climate change. Yet a recent publication¹⁹ suggests that journalists in developing countries face a number of challenges in their coverage of climate change.

The report identifies a lack of training, a lack of support from editors, and limited access to information and people to interview. It suggests that climate change programming needs to move into new areas, addressing 'political, economic and human interest stories', and move away from pure environmental programming. It emphasises that while news coverage of climate change in non-industrialized countries is increasing, the quantity and quality of reporting does not match the scale of the problem.

It goes on to point out that a reliance on reports from Western news agencies, rather than locally relevant news, as well as sparse coverage of adaptation measures means that audiences, particularly the world's poor, are being underserved. Finally, it hints at the potentially important role non-news media (such as talk shows, dramas and public

⁹ Ibid.

¹⁰ *Public perceptions of Climate Change in Cambodia*, Danish Church Aid and Christian Aid, Cambodia, 2009

¹¹ Where the terms 'climate change' and 'global warming' appear between quotation marks, it indicates a reference to the Khmer terms '*Kar PreProul Akas Theat*' and '*Kar Leung Kamdao Phen Dey*' respectively. Further detail is provided on p35 in the section *Translating climate change*.

¹² *Measuring Awareness of Climate Change*, Report on Stage 1 of ESPACE project Adapting to Climate Change: Raising Community Awareness in West Sussex, West Sussex County Council, UK, 2005

¹³ *Africa Talks Climate*, BBC World Service Trust, 2010

¹⁴ *National Survey: Perception of climate change in Cambodia*, Elizabeth Smith and Nop Polin, Geres, 2007.

97% of those who had heard the term 'climate change' believed they would be affected and 61% of these were 'very concerned' about climate change.

¹⁵ See *The Heat is On*, I-TRAK survey, Indochina Research, 2010: <http://www.indochinaresearch.com/i-trak/reports.php> In Cambodia, 200 residents of Phnom Penh were surveyed.

¹⁶ Ibid.

¹⁷ *Public Perceptions of Climate Change in Cambodia*, Geres, December 2009. Conducted in Kompong Chhnang, Kompong Speu, Prey Veng and Battambang provinces.

¹⁸ See *People's Recommendations on Climate Change via Radio Talk*, by the Cambodian Centre for Independent Media, 2009.

¹⁹ *Time to Adapt? Media Coverage of Climate Change in Non-Industrialised Countries*, Mike Shanahan, 2009

service announcements) can play in providing information to audiences on climate change.

However, any information provision must take into account people's understanding of climate change. Unfortunately, the research community has not come to a consensus on what constitutes 'knowledge' of climate change. If someone in Cambodia correctly identifies a series of projected impacts of 'climate change' (when the words for 'climate' and 'weather' are much the same in Khmer), but does not understand the causes of global climate change, can we say that this individual has an 'experiential understanding' of climate change, or simply that they are highly aware of the weather patterns?

When most people's understanding of climate change relates to changes they see around them – changes that shape their livelihoods and their lives – the message they receive about climate change must reflect this understanding.



Source: BBC WST 2010

Methodology

The study used a combination of qualitative and quantitative methods.

Qualitative Research Design

In-depth interviews were conducted in person with 101 representatives from media, industry, national and provincial government, non-governmental organizations, celebrities, and local leaders including commune council chiefs, village chiefs, village elders and religious leaders.

Written transcripts were produced from the recordings of these interviews. The Khmer transcripts were then translated into English to enable the international team to work together. These transcripts were coded using Atlas.ti software, according to a coding frame developed by the Trust research team through a collaborative process that used open coding to identify new codes and so build on an existing list of codes. The coding frame provided a common analysis framework for all of the team members involved in coding. The inter-coder reliability score achieved by the research team was 0.74. This score was generated by comparing the results of each researcher working on the coding and calculating the average number of times that the same code or different codes had been used on a selected piece of text by the researchers.

Once the transcripts had been coded, the Atlas.ti software allowed the team to identify how each code emerged across the 101 transcripts. Some codes occurred frequently, generating a large amount of data from the transcripts. These provided the main themes for analysis. Other codes occurred less frequently, meaning that the number of quotes from different transcripts was smaller. The generation of these quotes from the transcripts complemented the team's reading of the transcripts, enabled key themes to be identified and described in the reporting and facilitated the selection of quotes for reporting.

Quantitative Research Design

A quantitative household-based cross-sectional survey questionnaire was used to collect information from 2401 members of the public from all 24 provinces of Cambodia.

Target respondents for the survey were Cambodian men and women aged 15 – 55, including people particularly vulnerable to the effects of climate change.

Respondents were selected using a multi-stage randomised sampling process which is detailed fully in the Methodology section in Appendix 1. The margin of error for the sample of 2401 respondents is plus or minus 2 per cent, with 95 per cent confidence.

Given the small numbers of respondents from coastal and fishing communities included in the original sample, two booster samples were carried out to obtain samples of 35 people from these groups. This was a purposive sample rather than a random sample and although these findings are included in reporting, they are included with the understanding that the data for the two fishing communities cannot be directly compared to or included in analysis with the findings for the entire sample, and are not nationally

representative. As such, the figure for the entire sample is 2401 and the respondents in the booster sample are not included in this figure. In the tables in the appendix of the report, the data from the two booster samples are clearly indicated and are presented separately from the data for the entire sample of 2401 respondents. (See Appendix 2 for the complete set of data tables.)

Analytical techniques employed include descriptive (frequencies) and bivariate statistics (t-tests, z-tests, and chi-square) to describe and compare the differences in a number of key measures of knowledge, attitudes and practices regarding climate change. Chi-square tests were employed to test levels of association between non-parametric nominal variables. Z-tests were used to detect significant differences between proportional responses of survey sample subgroups. T-tests were used to detect significant differences in mean scores between discrete subgroups of the survey sample.

The sample was analysed according to the following comparative categories:

- Total sample
- Major geographic regions
- Area of residence (urban/ rural)
- Gender (male, female)
- Age breaks (15-24 yrs, 25-34 yrs, 35-44 yrs, 45-55 yrs)
- Education: no schooling, primary school, secondary school, high school and university
- Progress out of Poverty Index categories: Poorest, Poor, Medium, and High ²⁰
- Occupational categories – farmers, business people, sales and services, skilled manual, housework/housewife, teacher, university student, non-university student, professional technical management, government officials, forestry workers, coastal fishermen/women, and freshwater fishermen/women.

For more detail on the research methodology, please see Appendix 1.

Socio-demographic profile of survey sample

Before booster sampling, a total of 2401 respondents were interviewed, from the 24 provinces of Cambodia.

A total of 66% of respondents come from rural areas, and there are equal proportions of male and female respondents in the sample.

A total of 11% of people in the sample have no schooling, 41% have primary schooling, 28% have attended secondary school, 16% high school, and 4% have a university education.

To assess the likelihood that a respondent lived below or above the poverty line, Progress out of Poverty Index (PPI) questions were integrated into the survey questionnaire. Using respondents' scores, four different groups were created according

²⁰ See *Socio-demographic profile of survey sample*, below, for more details on the PPI.

to the PPI: poorest (most likely to be living below the poverty line), poor, medium and high.²¹

A total of 11% of respondents are in the poorest group, 39% in the next PPI group, 40% in the medium group, and 10% in the high PPI group.

In total 21% of the sample is defined as 'working youth'.

In total 88% own land.

The proportions of respondents within different occupational groups are as follows:

Farmers **46%**

Business people **16%**

Sales and services **4%**

Skilled manual **4%**

Housework/housewives **6%**

Teachers **2%**

University students **2%**

Non-university students **10%**

Professional-technical-management **4%**

Government officials **4%**

Forestry workers: less than **1%**

Fishing communities make up less than 1% of the original sample. The 2 booster samples containing members of freshwater and saltwater fishing communities are each equivalent to just over 1% of the study population.

Study limitations and lessons learned

Social Desirability Bias

Social desirability bias refers to the tendency of respondents to reply in a manner that will be viewed favourably by others. It occurs when study respondents give replies that are not necessarily true but that they think will be regarded positively or be socially acceptable.

The research methodologies made considerable effort to prevent response bias, minimise embarrassment and ensure confidentiality. Male interviewers interviewed male respondents, and female interviewers interviewed females. All interviewers and fieldwork team members were trained about ethical issues including confidentiality and anonymity. All selected respondents were informed about the study and asked for their consent to participate in it. Respondents were able to skip questions or withdraw from the study at any time. All recordings, complete transcripts and survey questionnaires were stored on a secure computer drive during data collection, data processing and analysis. Only people responsible for data processing and analysis had access to these files, which were identified with codes and not names.

²¹ For more information on the Progress out of Poverty Index, see <http://progressoutofpoverty.org/>

Acquiescence Bias

Acquiescence bias refers to the tendency of respondents to behave in a compliant manner, answering positively to questions, regardless of their content. Some questions – for example, in which the researchers ask respondents to prioritize key issues – could suffer more from acquiescence bias. For this reason, the questionnaire was designed to seek unprompted, as well as prompted responses, to certain questions. Although unprompted questions are useful in this respect, the researcher may miss some information that is not at the front of the respondent's mind. For this reason, many questions were followed up by a list of prompted items.

Qualitative and Quantitative Comparative Limitations

The qualitative research was designed to explore the opinions of key informants from across Cambodian society. The scope of the sample size (n=101) captured a breadth of opinion among key informants.

Because qualitative research was not conducted among the public, and a quantitative survey was not used among key informants, it was not possible to compare the views of the public and key informants consistently.

Survey sample limitations

Remote Rural

Villages that required more than a day of travel by road from the province's main town, or with fewer than 25 households, were excluded from this study due to logistical and cost considerations. Other villages were substituted using a randomised method.

Available Respondents

The study only includes respondents who were present in the household on the day of the survey. It does not include those who are employed away from home (migrant workers), nor residents of institutional residences such as those belonging to monasteries, garment factories, high schools and universities. Nor were respondents recruited from other institutions such as prisons, hospitals or the military. People with no fixed address (living on streets or homeless) were also not included in the survey.

Khmer Speakers

The study was conducted in the Khmer language, so it excluded people who could not speak Khmer.

Target groups and booster sampling

There were insufficient numbers (<35) of respondents from freshwater and coastal fishing communities in the original sample of 2401 respondents. Therefore, a purposive 'booster' sample of respondents from freshwater and coastal fishing communities was created in order to achieve a sub sample group that was sufficiently large for analysis.

It should be noted that the 'booster' sample cannot be considered nationally representative, as the respondents were purposively sampled. For this reason, the

'booster' sample is featured separately in data tables, rather than being incorporated into the national sample of 2401 people.

The original proposal also requested analysis of respondents who relied on non-timber forest products (NTFPs) for their livelihoods. Given the limited information on the proportion of the population which relies primarily on NTFPs for their livelihoods, it was anticipated that the cell size for this group would be insufficiently large, as was indeed the case. It was agreed that a purposive sample of these individuals would not be appropriate, given the operational challenges of accessing such remote rural populations.

Validity

Unfamiliar Concepts and Terminology

Formulating questions about concepts and terminology with which respondents are not familiar poses challenges. These challenges are, to some extent, addressed using a qualitative approach, which can explore understanding and misconceptions in greater detail.

Because qualitative research was not carried out among the general public, careful attention was paid to the way in which unfamiliar concepts and terminology were approached in the survey questionnaire. The questionnaire was developed in consultation with the Ministry of Environment, UNDP and Oxfam. It drew on the lessons learned from other research on the topic, where the relevant documentation was publicly available. It also drew on lessons learnt from the Trust's previous work in the field of climate change.

The questionnaire was piloted and amended in response to feedback from the fieldwork teams who carried out the pilot before the survey was carried out at scale.

Time of year

The research took place between May and June 2010, during a period in which Cambodia experienced high temperatures and most areas of the country were suffering the effects of drought. This could in part explain the frequent mentions of drought and hot temperatures and the relatively infrequent mentions of flooding.

Self-Reported Data

The questionnaire asked respondents about their *perceptions* relevant to the topic of climate change. Respondents were asked whether they had sufficient water for their work and personal needs, for example. Such a subjective measurement was never intended to replace an assessment using national or international indicators, although it could complement an evaluation based on these.²² Similarly, people were asked about their experience of extreme weather events. Although these were based on the questions asked in the national survey outlined in the Cambodia National Action Plan of

²² See http://earthtrends.wri.org/pdf_library/cp/wat_cou_116.pdf and <http://www.fao.org/nr/water/aquastat/countries/cambodia/index.stm>

Adaptation,²³ it should be acknowledged that popular usage of the word 'storm' may differ from the scientific definition.²⁴

Analysis

Weighting

The total sample was designed to match the national population distribution. However, it was not weighted.

The study used different methods to those used for the national census,²⁵ was constrained by logistical and cost considerations, and gathered a smaller sample than the national census. Practical considerations meant that occupations were also categorised in less detail in this study than in the national census. In addition, data relating to the proportion of people reliant on non-timber forest products (NTFPs) for their livelihoods is not available.

For these reasons, it is not useful to attempt a consistent comparison of the socio-demographic profile of our sample with the socio-demographic profile presented in the national census. However, it may be useful to look at a few important aspects of the census:

Farmers

The census finds that 71% of the population are engaged in crop and animal production, with 63% working as subsistence farmers, fishers, hunters and gatherers.

A total of 46% of respondents in this study sample are farmers.

Fishing communities

In total 1% of the census population work in fishing and aquaculture. This corresponds to their representation in the sample in the present study.

Students

Students make up 25% of the census population, and 12% of the study population, suggesting they are under-represented in the study sample.

Sub-group Analysis

Some sub-group analysis is limited by small cell sizes and by the application of two different sampling approaches, as discussed above.

Analysis of Association and Attribution of Causation

The analysis reveals associations between some demographic variables and knowledge, attitudes and practices explored in the study, but it does not indicate the *direction* of the relationship. For this reason, the presence of an *association* cannot be interpreted as proof that one variable *causes* another.

²³ A total of 684 households in 17 provinces were surveyed for their experiences of floods, drought, windstorms, seawater intrusion and high tides. See <http://unfccc.int/resource/docs/napa/khm01.pdf>

²⁴ As defined by the UK Met Office: 'Storm: Winds of force 10 (48–55 knots) or gusts reaching 61–68 knots'.
<http://www.metoffice.gov.uk/weather/marine/guide/glossary.html>

²⁵ See <http://celade.cepal.org/khmnis/census/khm2008/>

Further analysis, such as was beyond the immediate scope of this study, would enable these relationships to be examined in more detail. Multivariate regression analysis would be recommended in order to control for the impact of confounding variables when looking for causal relationships. Structural equation modelling could test the strength of relationships between groups of variable constructs and confirm the presence, strength and direction of causal relationships.

Lessons Learned

Given that few people are familiar with the concepts or terminology involved in this subject, it is essential to take time to train researchers and pilot the research instruments. The training given to all researchers involved in the study was essential to producing rigorous results.

Conducting qualitative research among the public as well as among key informants would have allowed for a consistent comparison of the understanding and misconceptions among the general population and key messengers and decision-makers.

An extended timeframe for the research, with interviews conducted in both dry and rainy seasons, would enable the collection of data that could be used to consider the influence of current weather conditions on any discussion of weather and climate.

Key Findings

What do Cambodians know and think about climate change?

There are different ways to know about climate change. One is to understand the science: that human activities, such as the burning of fossil fuels for energy, are increasing the amount of heat-trapping gases in the atmosphere, which warm the earth and affect its climate system. Another is to experience it first hand: to witness, over a lifetime, changes in rainfall patterns that affect the harvest; to suffer from increased droughts, floods and other climatic disasters that can wipe out comes and crops; or to be at the receiving end of the spread of vector-borne diseases, such as dengue and malaria.²⁶

The findings of this research suggest that few Cambodians understand the scientific basis for climate change. However, as the projected impacts of climate change become reality, Cambodians will experience those impacts at first hand. This being the case, it will be important to understand how Cambodians have experienced weather changes including extreme events, how they explain them and how they think they can prepare for and respond to them. In order to communicate climate change to the public, it will be necessary to focus explanations on this experiential understanding of climate change, rather than relying on scientific language that makes little sense to many Cambodians.

²⁶ See the Cambodia NAPA: “ vector-borne diseases, in particular malaria, may become more widespread under changing climatic conditions. With some 800 deaths per year, Cambodia already has the highest fatality rate from malaria in Asia (CNM, 2003). The actual death toll due to malaria may be 5-10 times the officially recorded figures (RGC, 2002).”

The aim will be to eventually bring an understanding of people’s experiences together with a more developed understanding of the scientific basis for global climate change.

This section of report begins by examining the experiences of Cambodian people in relation to recent weather events, as well as their observations of changes in weather and climate. It then goes on to explore their understanding of the terminology related to climate change, before investigating people’s perceptions of weather changes in relation to their own lives. In later sections, the report details the media consumption findings of the study, after which the findings of the qualitative research with Cambodian key informants are presented.

Experiencing changes in the weather and environment

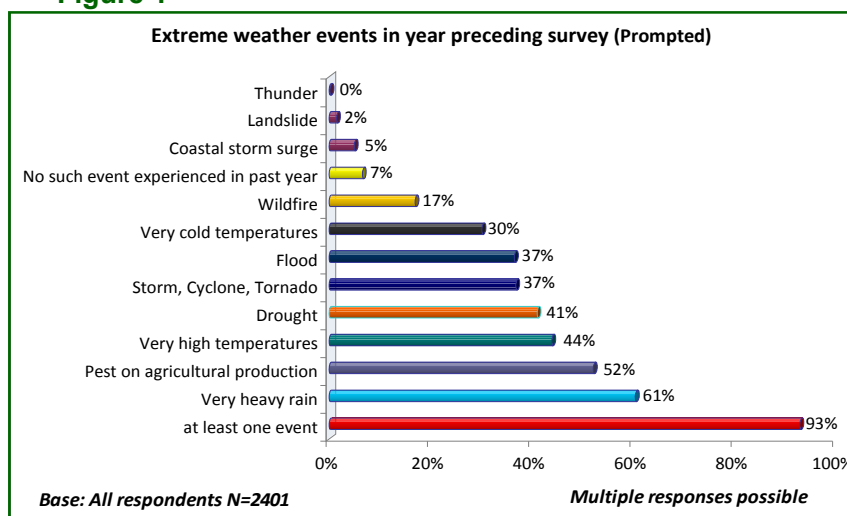
Key Insights

Cambodians say that their weather and environment are changing, that extreme weather events are more frequent and more intense than they once were, that temperatures have increased and that rain patterns and seasons have changed. Cambodians appear to understand ‘climate change’ in the context of these localised changes in weather, rather than as global climate change.

Extreme weather events

Nine in ten (93%) of Cambodians say they have experienced at least one extreme weather event in the year preceding the survey interview.

Figure 1



More than half say they have experienced very heavy rain (61%) and pests which affect agricultural production (52%). Over four in ten were affected by very high temperatures (44%) and drought (41%), and a similar number experienced storms (37%) and flooding (37%). Three in ten say they have experienced very cold temperatures (30%), while around half this number experienced a wildfire in the previous year (17%). Only 7% reported experiencing no such event.

Men and women appear to recall extreme weather events differently. Just 2% of men say that they have not experienced an extreme weather event in the year preceding the

survey, compared to 12% of women. For each of the events detailed in Figure 1, except for very cold temperatures, more men than women say that they have experienced it.

The data suggests that people in Phnom Penh and the Plain region suffer somewhat less from the impacts of extreme weather, with over twice as many (12% and 10% of residents in the respective regions) reporting no extreme weather event in the previous year. In the Phnom Penh region, the proportions of people who experienced agricultural pests, floods and very cold temperatures are significantly ²⁷ smaller than all other regions.

Information about extreme weather events

Key Insights

Almost all respondents say they have experienced an extreme weather event in the past year. More than a third (36%) of these people did not receive any information about the event, and of those who did, only a quarter (25%) received this information before the extreme weather event began.

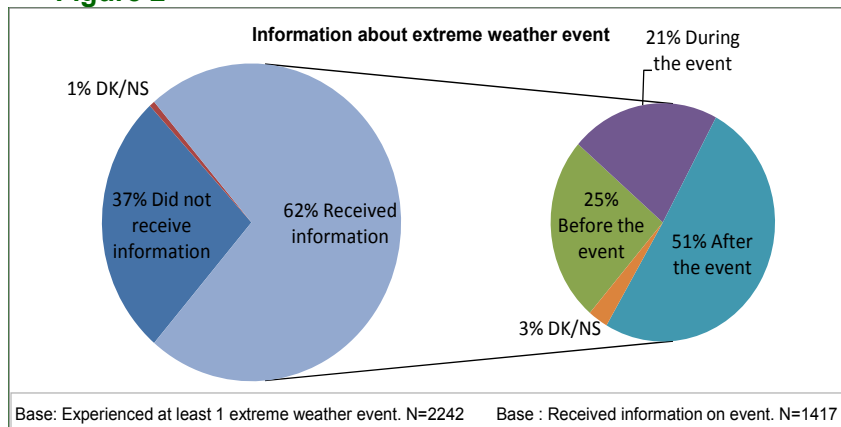
After respondents were asked to select the extreme weather event that they thought had the greatest effect on their lives, they were asked a number of questions concerning the information they received in relation to this event. More than a third (36%) had not received any information about the extreme weather event, and of those who did, almost three-quarters (72%) only received this information during or after the event.

- Slightly more men (66%) than women (60%) received information, but there was little difference in the timing of the information men and women received.
- More urban (71%) and more young people (68%) said they had received information about the extreme weather event.
- Residents of Phnom Penh and Coastal regions reported most frequently that they had received information on the extreme weather event (68% and 78% respectively).
- More people with higher levels of education (88% of those with a university education) and from the higher PPI groups (77% with 'high' on the PPI), as well as teachers (93%), students (88%) and government officials (84%), say they received information on the weather event.

More farmers (44%) than any other occupation did not receive any information about the extreme weather event they experienced. More skilled manual workers (40%) and business people (35%) than other occupations received no information.

²⁷ Where it is stated that there is a significant difference, this is a statistically significant difference. Details can be found in the data tables in Appendix 2.

Figure 2



Of all those who reported experiencing an extreme weather event in the past year and receiving information, half (51%) received information about the event only after it had happened. There are few variations among different subgroups, with the exception of Tonle Sap, where more people (57%) said that they received information after the event, and there were comparatively fewer people (20%) who reported receiving information before the event.

More people from Phnom Penh (36%) and the Plain (31%) region say they received information *before* the extreme weather event took place.

People most frequently mention television (59%), radio (52%) and word of mouth from neighbours (37%) as sources of information on the extreme weather event.

Higher proportions of men (62%), urban residents (75%), residents of the Phnom Penh and Plain regions (83% and 67% respectively) and those with higher education levels (86% of those with university education vs. 35% with no schooling) and from the higher PPI groups (79% from the 'highest' group vs. 31% from the 'poorest') mention television as a source.

Radio was a source of information on extreme weather events for significantly larger proportions of men (58%), rural people (54%), and farmers (55%) within their subgroups.

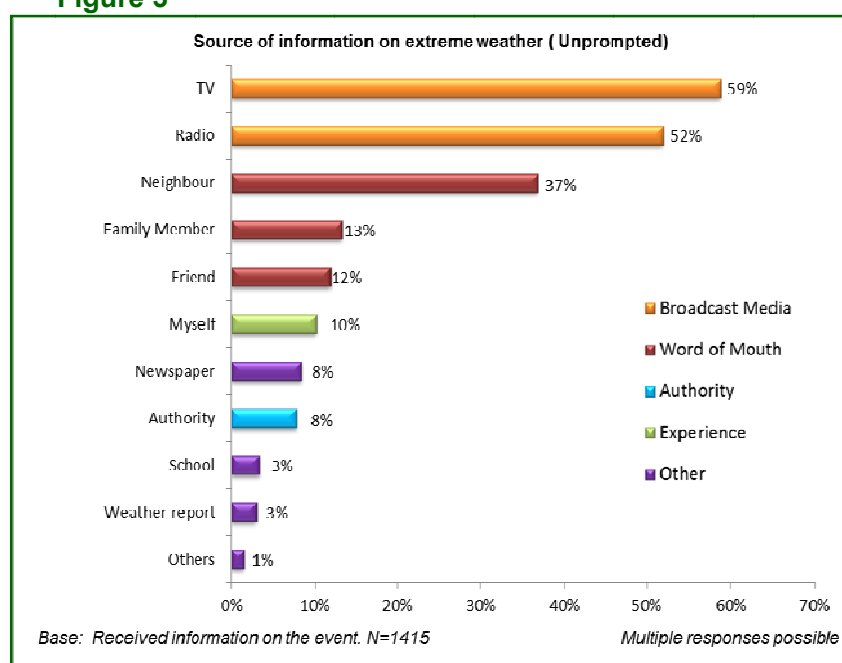
One in ten people say that they received information about the event through personal observation, with significantly larger proportions of men (13%), rural residents (11%), and people from the Tonle Sap (16%), Coastal (14%) and Mountain (12%) regions saying that they found out this way. A high proportion of respondents from the fishing communities say the same.²⁸

²⁸ It should be noted that the 'booster' sample for coastal fishing communities cannot be considered nationally representative, as the respondents were purposively sampled. Due to the different methods used, we cannot compare this sample statistically to the total sample of 2401, nor to the results for different subgroups. As such, we will not include statistical results for the 'booster' samples in the body of this report. These results can be found in the full data tables contained in Appendix 2.

More rural residents say they received information through neighbours (43%) and family members (15%), particularly outside of the Phnom Penh and Plain regions. More people with lower educational levels (49% with no schooling) and from lower PPI groups (47% from the 'poorest' PPI group) say they were given information by a neighbour, as do farmers (41%) and business people (42%).

While few respondents (8%) mention "authorities" (commune council representative or village chief) as a source of information on these events, significantly more rural (10%) people, residents of the Mountain (14%) region, and the least educated (16%) and poorest (17% of those from the 'poorest' PPI group) say they received information on these events from their village or commune chief.

Figure 3

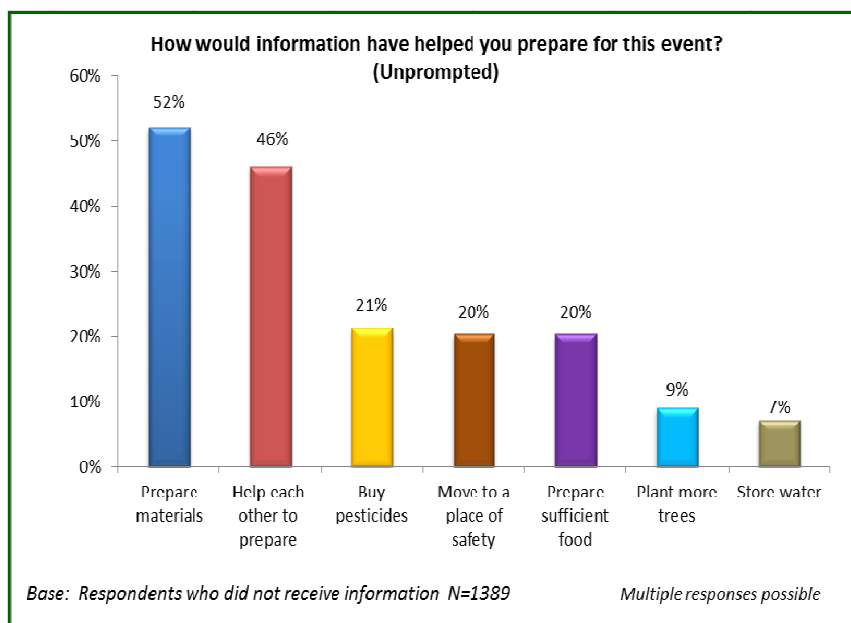


How information helped people to prepare for extreme weather

When asked how information helped them prepare for the weather event they mentioned, many say that it helped them to prepare materials²⁹ (52%), and that it helped them to support one another as they prepared for the event (46%). Around a fifth of respondents said the information they received meant they bought pesticide (21%); moved to a place of safety (20%); or prepared sufficient food (20%).

²⁹ This refers to something that could help to facilitate a response to an extreme weather event, such as a boat, generator or wood for construction, etc.

Figure 4



Changes in the weather

Key Insights

Cambodians say that their weather and environment is changing. They think that temperatures have increased, and some say that the patterns of the rains and the seasons are not as they used to be. People seem to have started noticing some of these changes more recently than others.

Figure 5

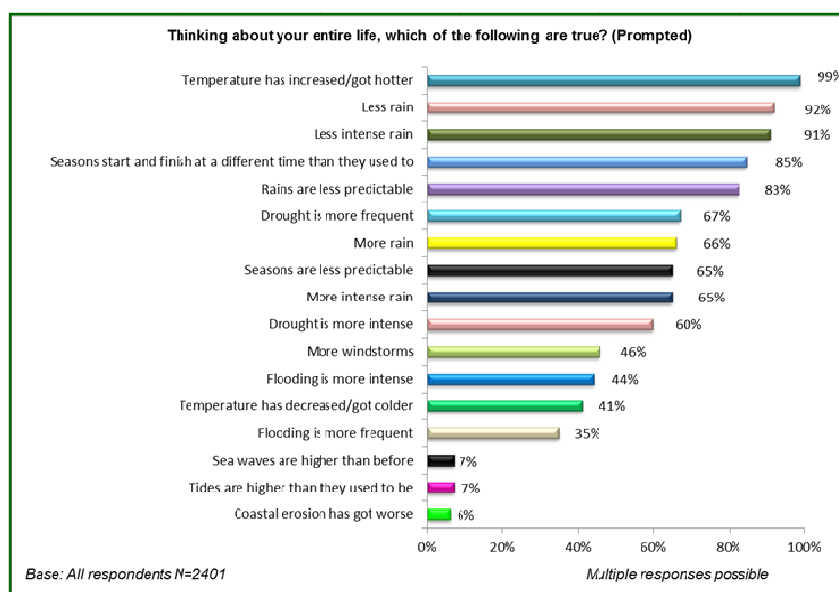
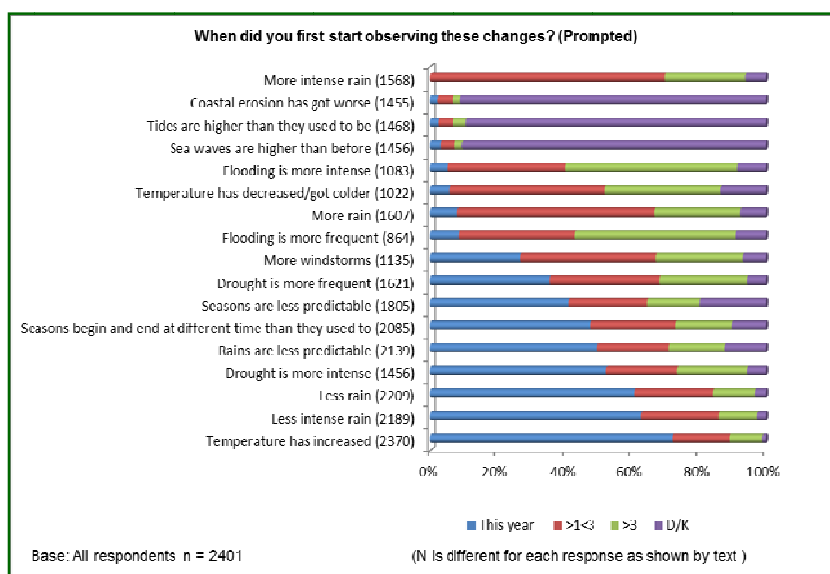


Figure 6



Most of those who think that the seasons are harder to predict, that temperature has increased, that drought has become more frequent, that there is less rain and that rains are less intense and less predictable, say they have observed these changes over the past year.

For most other changes, people say they started observing them more than a year ago, and almost all the people who say that they have noticed higher tides and waves and worsening coastal erosion cannot remember when they started observing these changes.

There are differences in the ways people understand their changing weather.

- A significantly greater proportion of farmers say that drought has become more frequent (74% of farmers) and more intense (70% of farmers). Greater proportions of respondents from rural areas and from the older age groups have observed the same.
- More people from higher PPI groups than from lower ones say that the rains and the seasons are less predictable.
- A higher proportion of older people than younger people (45-55 years and 15-24 years) report that drought is more intense (72% vs. 48% respectively), and that windstorms are more frequent (50% vs. 40% respectively).
- Substantial proportions of coastal fishing communities have seen coastal erosion worsen over their lifetimes and say the tides and waves are higher than they once were.³⁰

³⁰ It should be noted that the 'booster' sample for coastal fishing communities cannot be considered nationally representative, as the respondents were purposively sampled. (See Methodology, p5.) Due to the different methods used, we cannot compare this sample statistically to the total sample of 2401, nor to the results for different subgroups. As such, we will not include statistical results for the 'booster' samples in the body of this report. These results can be found in the full data tables contained in Appendix 2.

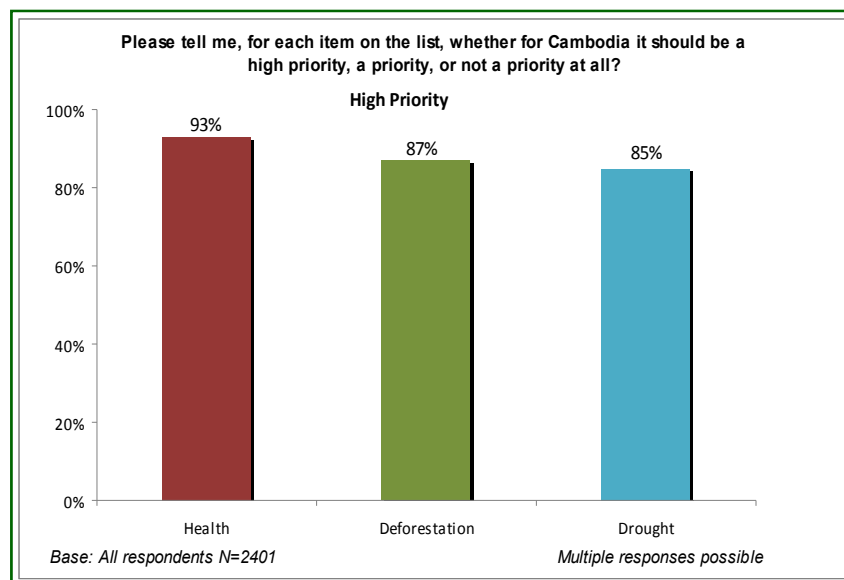
Changes in the environment

Cambodians have noticed changes in the environment as well as in the weather. The change in environment that is mentioned most frequently by the public and by key informants is deforestation.

Deforestation concerns many Cambodians, who also consider the forest the country's greatest environmental asset. When asked to choose the most important natural resources in Cambodia, half of people say trees or forest are the most important resource, and three quarters of people include trees and forest among their three most important natural resources.

Given the value that people place on trees, many people are concerned by the loss of forest. Indeed, most Cambodians see deforestation as one of the country's highest priority issues.

Figure 7



Knowledge and understanding of 'climate change'

Key Insights

Most Cambodians' understanding of climate change terminology, causes and effects is low. Many recognise the terms 'climate change' and 'global warming'. However, this recognition does not indicate understanding of climate change as a global phenomenon.

Climate change terminology

Translating climate change

It is important to understand that, in translation from English, Khmer terminology related to climate change conveys meanings different to the English terms. That translation can inhibit understanding is an important finding of recent research into public perceptions of climate change in Africa.*

The terms 'climate' and 'weather', '*akas theat*' and '*theat akas*' in Khmer are very similar. They literally mean 'the five elements', which are water, earth, fire, wind and air, or atmosphere.

Therefore, the term 'climate change' ('*Kar PreProul Akas Theat*') can be understood as 'weather changes' ('*Kar PreProul Theat Akas*'). This is important, given that 'weather changes' suggests short-term changes in the weather, whereas 'climate change' conveys changes in weather patterns over a longer period of time. It is unsurprising, then, that key informants frequently refer to isolated weather events, such as drought, or seasonal changes, to explain the term 'climate change'. As one commune council leader explains, "*Over the past few years, the climate has changed a lot but this year it has changed very much in more than 65 years I met with climate change once. I do not remember the year, but when I was 13 or 14 years old, there was no rain until December. There was no rain for one year We don't know what causes it and we are not scientists.*"

'*Kar Leung Kamdao Phen Dey*' is the Khmer translation of 'global warming', and means 'the increase of heat on the earth'. '*Phen Dey*' is the term for 'planet earth', while '*dey*' means 'earth' in the sense of 'soil'. It is possible that this term could be misunderstood to mean 'the heating of the soil', and so might be conflated with drought.

The 'greenhouse effect' and 'greenhouse gases' are particularly problematic terms. First, few Cambodian people have ever seen a greenhouse, so the expression does not function as a successful metaphor for the process of global warming in the Cambodian context. Instead, 'greenhouse' is translated as 'glass house', and this leads many to make connections between increasing temperatures and the increase in urban construction, or the more ubiquitous use of glass and reflective surfaces in building, machines, and motor vehicles. As one media representative explains, "*I have heard the word. People said that because we use a lot of glass, it reflects heat from the sun. I don't know whether it is right or wrong.*"

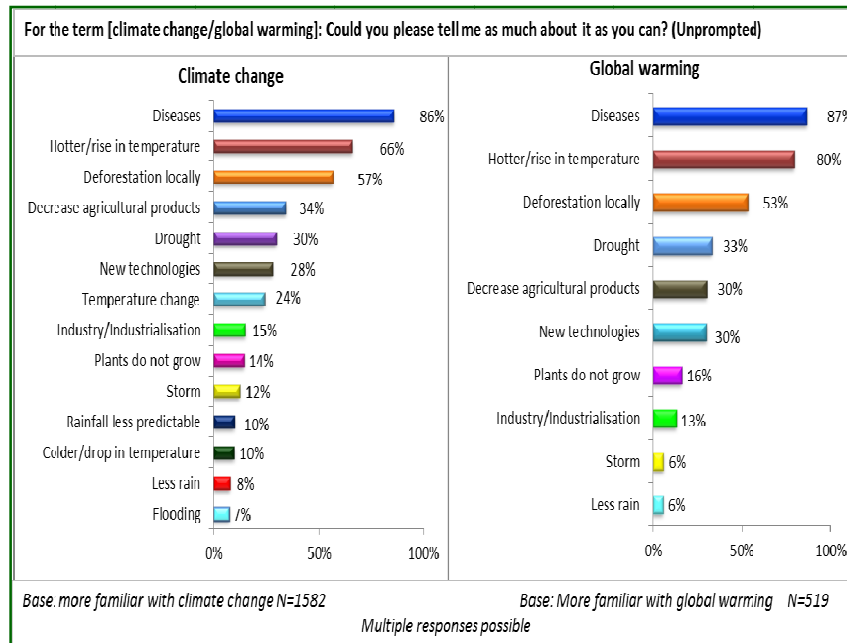
*BBC World Service Trust, Africa Talks Climate, 2010.

Almost 90% of people recognise at least one of the terms 'climate change' and 'global warming'. More than eight in ten (84%) recognise 'climate change', while seven in ten (70%) say they recognise 'global warming'. Of those who recognise both terms, however, most (73%) say they are more familiar with the term 'climate change'.

88% of men, 91% of urban respondents, 87% of those aged 15-24, 99% of those with a university education and 93% from the 'high' PPI group have heard of 'climate change'.

The respondents were asked to provide more detail about the term that they had said was the most familiar to them. The charts below illustrate the most frequently mentioned terms and indicate the similarities in most people’s understanding of the terminology.

Figure 8

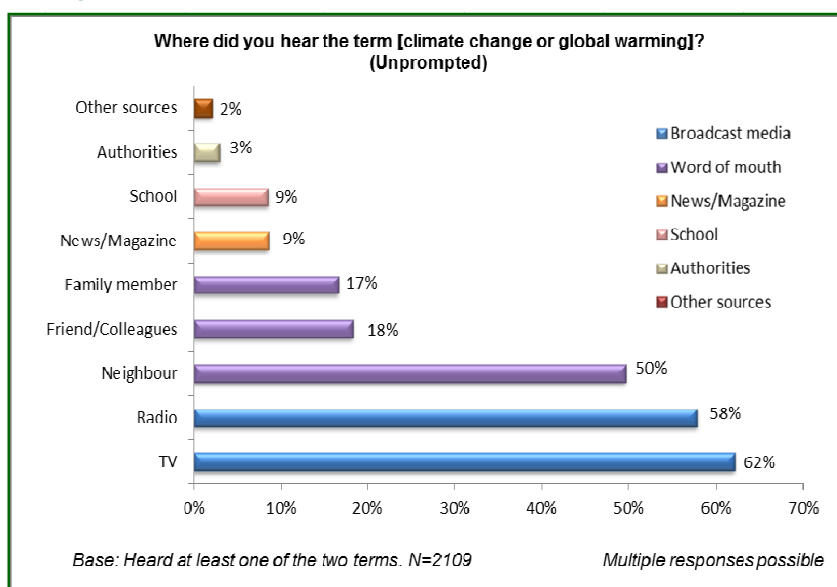


People appear to understand both ‘climate change’ and ‘global warming’ in relation to their impacts, rather than their causes. Most respondents associate both terms with disease, an increase in temperature and local deforestation. More than half mention local deforestation, and only a sixth, industrialization, in connection with both terms.

Sources of information on climate change terminology

Most people have heard about climate change through broadcast media (62% from TV, 58% from radio). This is followed by word of mouth; 50% of respondents have heard the term ‘climate change’ from their neighbours and another 18% said they heard the term from friends or colleagues.

Figure 9



Television was a source of the terms for more people from urban areas (77%), and particularly those in Phnom Penh (87%). Among the higher PPI groups (77% from the 'high' PPI group) and the more highly educated (86% with a university education), more people say they have heard the terms on television.

Radio has been a source for significantly more rural Cambodians (62%).

Significantly more women (54%) than men (46%) and more rural Cambodians (53%) than urban (44%) have heard the term 'climate change' or 'global warming' from their neighbours.

Of those respondents from poorer backgrounds (53% from the 'poor' PPI group) and with lower levels of education (57% with no schooling), significantly more say they have heard the terms from their neighbours than the rest of the sample.

More men (24%), more urban people (22%), and more of those with higher levels of education (35% of those with a university education), say they have heard the terms from friends and colleagues.

Print media is a source of the terms for 21% of people in Phnom Penh, and for far fewer in the other regions. More respondents with higher levels of education (34% with a university education) and from better-off backgrounds (20% from the 'high' PPI group) have seen the terms in newspapers and magazines.

Very few people say they have heard the terms from authorities (commune council representatives and village chiefs) of any kind.

Few people say they heard the terms at school, but many more 15-24 year-olds (23%), and those with high school education (23%), have heard the terms at school. This may

reflect the introduction of climate science into the Earth Sciences curriculum at some levels of secondary school education.

Understanding the causes of climate change

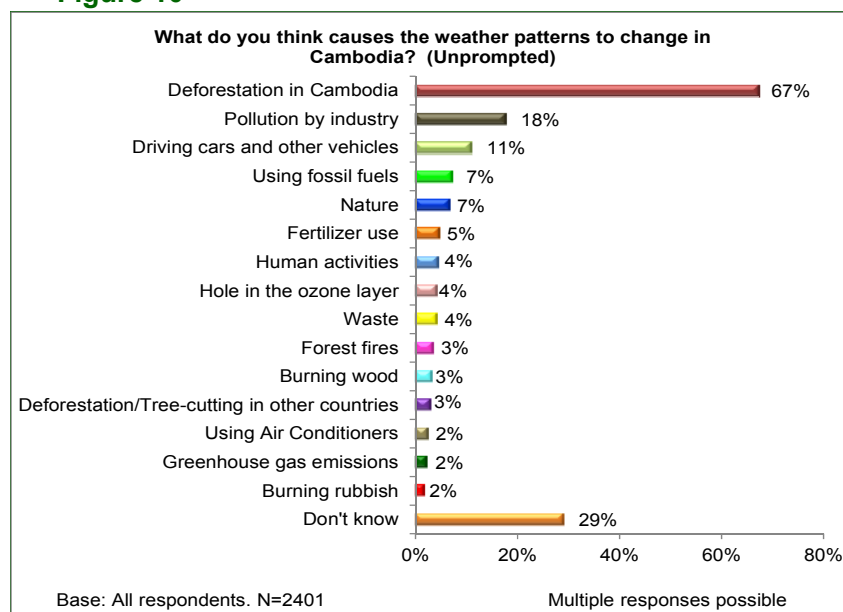
Key Insights

While only a small percentage of Cambodians spontaneously mention human activities as a cause of changing weather patterns, when asked directly, a third agree that their personal activities contribute. The majority of respondents blame deforestation for changes in the weather. A significant but much lower percentage blame pollution from industry, cars and fossil fuels generally.

When asked unprompted what they think has caused the weather patterns to change in Cambodia, two thirds (67%) of respondents think that deforestation in Cambodia causes the weather patterns to change, while just 3% mention deforestation outside the country's borders. Just 18% of respondents mention industrial pollution as a cause.

29% say that they don't know what causes the changing weather patterns, while just 11% mention driving cars and motor vehicles.

Figure 10

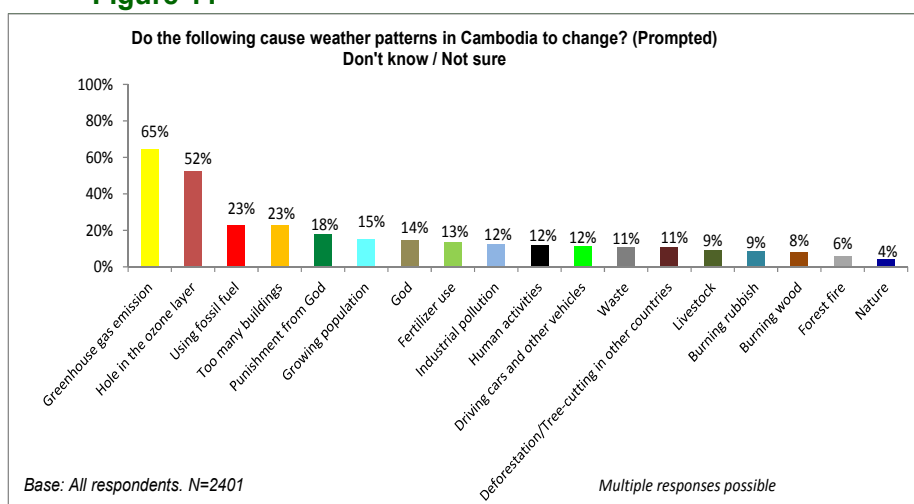


After respondents had provided the unprompted answers presented in Figure 10, they were then prompted from a list. The list contained both correct and incorrect causes of global climate change. (The content of the list was informed by previous Trust qualitative research on climate change.)³¹ Respondents were asked to respond yes, no, or don't know. The 'don't know' responses are presented in the graph below.

³¹ *Africa Talks Climate, 2009*. See www.africatalksclimate.com

The data indicates that respondents are uncertain of some of the correct causes of climate change: 65% of people say they do not know or are not sure whether greenhouse gas emissions are a cause of the changing weather, and 23% say the same about the use of fossil fuels. (The correct answer to these items is 'yes'.) 52% of people are not sure whether the depletion of the ozone layer has an impact on the weather. The idea that ozone depletion is connected to global climate change is an important misconception that has been identified by research in the UK and Africa.³² (The correct answer to this item is 'no'.)

Figure 11



Weather change and human activity

Do individual actions contribute to causing climate change?

When asked directly, one third (33%) of people say that their own individual actions contribute to climate change.

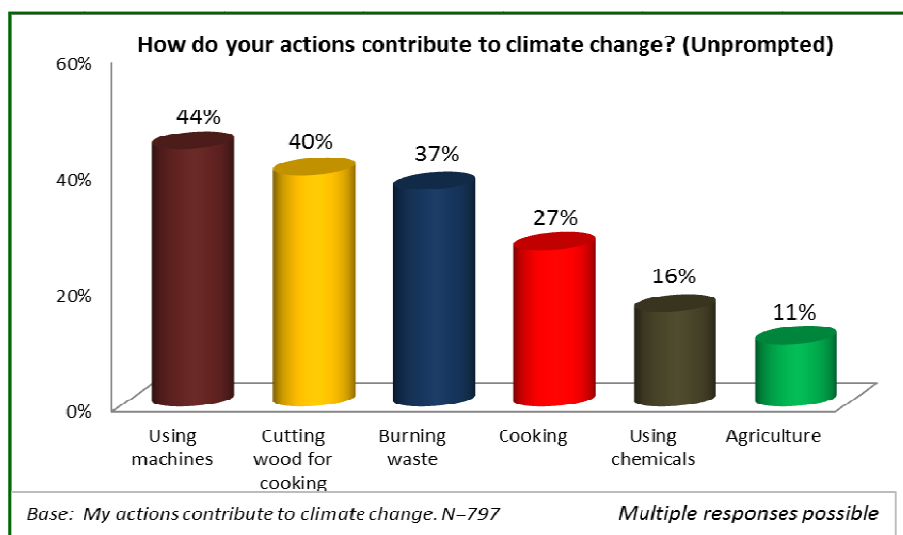
- Greater proportions of men (42%), urban residents (40%), those with higher education levels (82% with a university education), and those from the higher PPI groups (48% from the 'high' PPI group), say that their own actions contribute to climate change.
- There is also an association with age, with more 39% of the youngest respondents (those aged 15-24) saying that their individual actions contribute to climate change.
- 63% of teachers, 66% of students, 43% of professional-technical-management employees and 52% of government officials say that their actions contribute to the problem.

³² Ibid. See also *Measuring Awareness of Climate Change*, Report on Stage 1 of ESPACE project Adapting to Climate Change: Raising Community Awareness in West Sussex, West Sussex County Council, UK, 2005

- Greater proportions of women (62%), rural respondents (58%), those with the lowest levels of education (62% with no schooling) and in the lower PPI groups (59% from the 'poorest' and 59% from the 'poor' PPI groups) say that their actions do *not* contribute to climate change, or say that they do not know if they contribute.
- Greater proportions of farmers (59%) say their actions do *not* contribute to the problem, or say they do not know whether they contribute.
- A significant number of housewives (67%) and a substantial number of people from coastal fishing communities (71%) say they do *not* contribute to climate change through their individual actions.

Those who think that their actions *do* contribute to climate change suggest that using machines (44%), cutting wood for cooking (40%), burning waste (37%), cooking (27%) and using chemicals (16%) are ways in which they contribute to climate change as individuals.

Figure 12



Using machines

More men (53%), more urban respondents (58%), more of those with higher education levels (77% with university education) and from the higher PPI groups (69% from the 'high' PPI group) and more farmers (54%) say that they contribute to climate change by using machines. Very high proportions (80%) of residents of Phnom Penh say that they contribute to climate change by using machines.

Cutting wood for cooking

More men (45%), more rural respondents (52%), more of those from Coastal (65%) and Mountain regions (52%), and more of those with lower education levels (56% of those with no schooling) and from lower PPI groups (70% from the 'poorest' PPI group) mention cutting wood for cooking. Significantly larger proportions of non-university students say the same.

Burning rubbish

There is no significant difference between men and women, nor between rural and urban groups in their mentions of burning waste as an individual contribution to climate change. Significantly larger proportions of people from the Phnom Penh (45%), Plain (45%) and Tonle Sap (40%) regions mention burning waste, as do more of the youngest respondents (44% of those aged 15-24) those with secondary (40%) and high school education (49%), and those from the second highest PPI group (scoring between 50-74 points).

Cooking

More of those from the Phnom Penh (45%) and Tonle Sap (33%) regions mention this, as do those aged 25-34 (29%) and 35-44 (38%).

Using chemicals

More men (19%), more rural respondents (20%) and more of those from the Plain region (26%), when compared to their relative subgroups say that using chemicals is one way in which they have contributed to climate change.

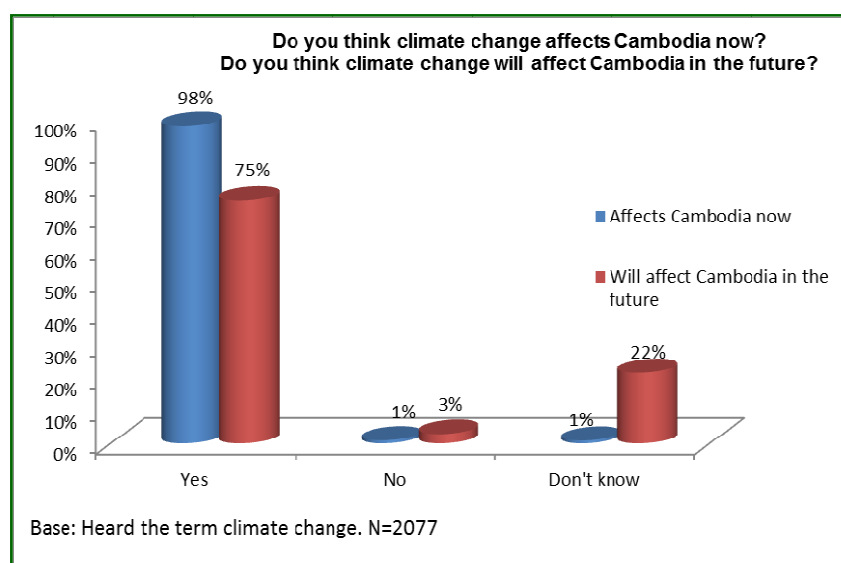
Understanding the impacts of climate change

Key Insights

Almost all of those respondents who have heard of the term 'climate change' (98%) also say that they think Cambodia is currently affected by climate change. Human health and agriculture are perceived to be worst affected. A substantial number of Cambodians (22%) say that they do not know whether Cambodia will feel the impacts of climate change in the future, suggesting that people are uncertain whether the changes they have experienced in their everyday lives will affect them in the long term.

Of those people who had heard the term 'climate change', almost all (98%) say that climate change is affecting their country now. Most (75%) say that climate change will affect Cambodia in the future.

Figure 13



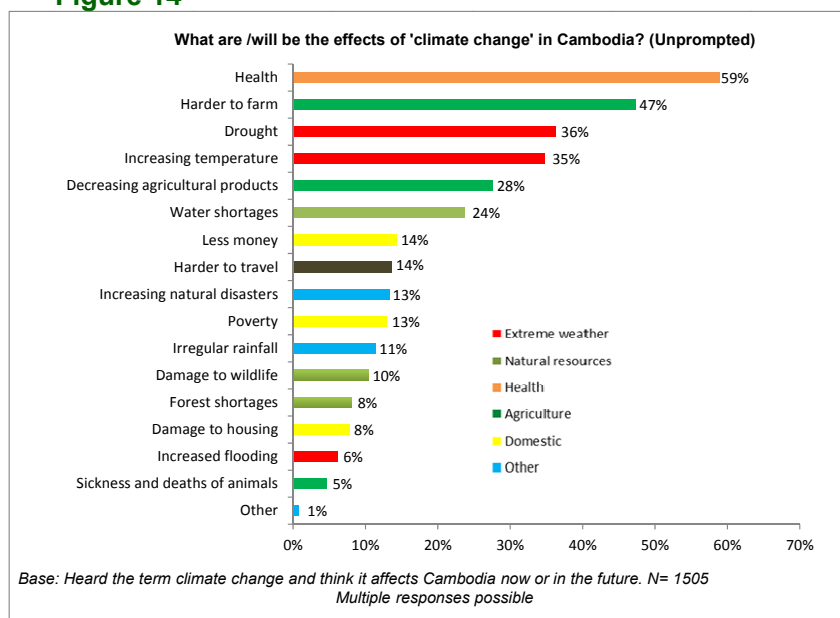
A substantial number of Cambodians (22%) say that they do not know whether Cambodia will feel the impacts of climate change in the future, suggesting that some people do not understand the term 'climate change' as referring to a long-term phenomenon.

Significantly more rural people (25%) than urban people (17%) say that they do not know whether Cambodia will be affected in the future.

Greater proportions of people with the lowest levels of education (29% with no schooling) say that they do not know whether the country will be affected by climate change in the future.

Those respondents who had heard the term climate change and say they think Cambodia is or will be affected by climate change were also asked what impacts they thought the changing weather would have.

Figure 14



Human health and agriculture are understood to receive the worst impacts of the changing weather. Most people (59%) mention the impact of climate change on health, with substantial numbers saying farming is more difficult (47%) and others mentioning drought (36%) and increasing temperatures (35%). Around a quarter (28%) mention decreases in agricultural yields and water shortages (24%).

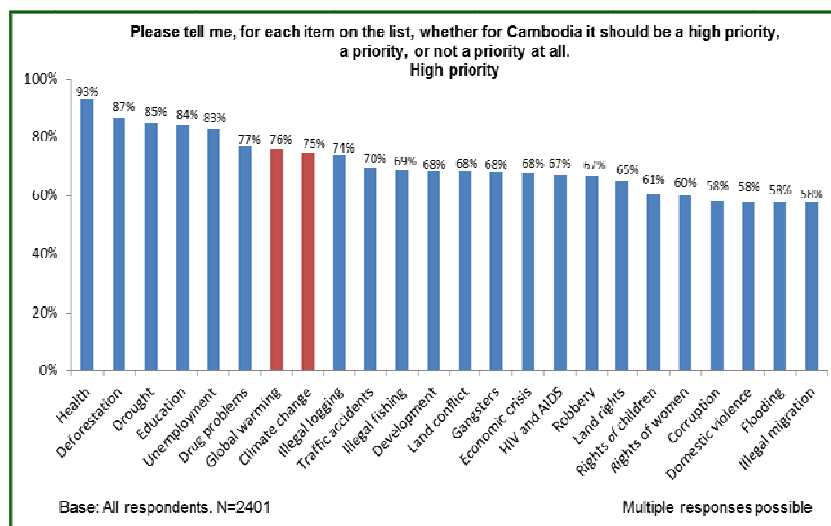
Concerns about the changing weather and environment

It is helpful to understand the ways in which people's understanding of their changing weather and of the terms 'climate change' and 'global warming' is related to their key concerns.

Respondents were read items from a list, and for each item, they were asked whether it was a high priority, a priority, or not a priority for Cambodia. In response to this question,

three-quarters of people responded that climate change and global warming are priority issues for Cambodia. This is in keeping with other research that has been conducted on the topic.³³ However, there are many other concerns competing for people’s attention, and with 93% of people considering it a high priority issue, health currently tops the list of people’s concerns for the country.

Figure 15



In relation to other environmental issues, ‘climate change’ and ‘global warming’ do not top the list, although they are among the top ten general priorities mentioned by respondents. Deforestation and drought are higher up the list of priorities, by around 10 percentage points. Global warming comes slightly higher than climate change; a possible explanation is that people understand the Khmer term³⁴ to refer to an increase in the temperature of the soil, and so connect it to drought. Less surprising, given the findings detailed above, is that deforestation is seen as the biggest environmental problem.

Family life, work and agriculture

In the context of family life, work and agriculture, people say that the changes in the weather bring diseases, make it difficult to cultivate and harder to work.

- Greater proportions of men are concerned that changes in weather make it harder to work (48%), to cultivate (54%) and to travel (39%), and more are concerned by the increased expense associated with the changes in the weather in relation to electricity and water bills (14%).
- Significantly greater proportions of women (17%) are concerned about a lack of water, about heavy rain (4%) and about weather changes making it more difficult to sleep (39%).

³³ See *Perceptions and coverage of climate change: what do we already know?*, p 1

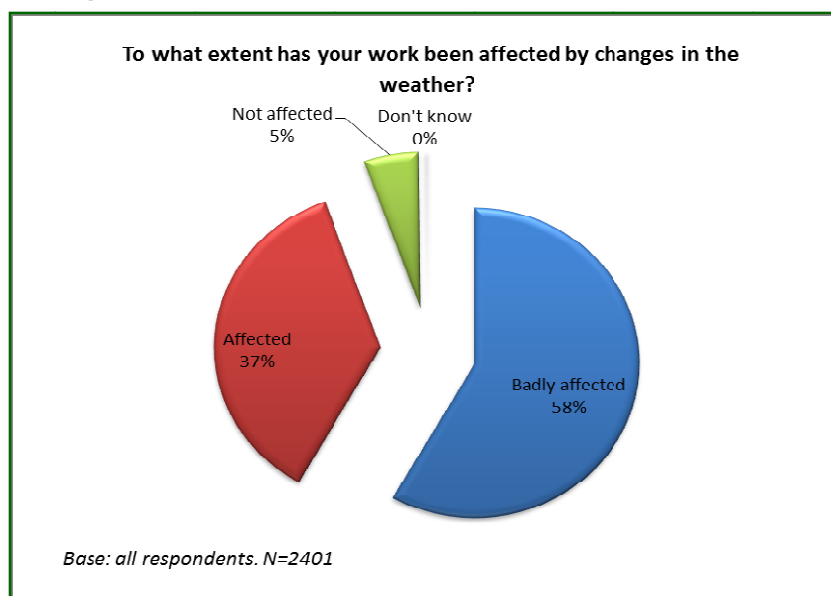
³⁴ Kar Leung Kamdao Phen Dey; see *Translating climate change*, p 19

- In rural areas, greater proportions of people are worried about weather changes making it harder to cultivate (62%), reducing agricultural yields (40%), and causing water shortages (15%).
- In Phnom Penh, more people than in other regions are concerned that weather changes lead to more difficult travel (57%), increased expenses (34%), and difficulty sleeping (7%).
- More people from the older age groups are worried about changes in weather causing disease (68% of those aged 45-55).
- More of those from younger age groups say that weather changes make it more difficult to work (49% of those aged 15-24) and bring heavy rain (4%).
- People from lower PPI groups and with lower education levels are concerned about the impact of weather changes on cultivation (70% from the 'poorest' PPI group and 65% with no schooling) and agricultural yields (44% from the 'poorest' PPI group and 42% with no schooling).
- Greater proportions of people with primary education (16%) and from the second and third PPI groups (29% of those with a PPI score between 25 and 74) mention a lack of water as one of their concerns.
- Meanwhile, those with a university education are more worried about weather changes bringing disease (77%) and making it more difficult to work (58%).
- Those with higher levels of education and from higher PPI groups are more concerned about weather changes making it difficult to travel (47% of those with a university education and 45% of those from the 'high' PPI group), and increasing expenditure on commodities such as electricity and water (30% of those with a university education and 31% of those from the 'high' PPI group).
- More farmers than any other group are worried weather changes will cause difficulties for cultivation (72%) and reduce yields (48%). More government officials than average are concerned about a reduction in yield. More skilled manual workers are concerned that changes in the weather will make it difficult to work (65%).

Livelihoods and climate change

Weather changes appear to have a massive impact on Cambodians' working lives, with 58% of respondents saying they are badly affected and 37% saying they are affected by changes in the weather.

Figure 16



74% of farmers say their work has been badly affected by changes in weather, and a large proportion of people from freshwater fishing communities (71%) say the same.

- More men (60%) than women (56%) say their work is badly affected by changes in weather.
- More rural respondents (67%) than urban (42%) say they are badly affected, and more urban residents (9% vs. 3% for rural residents) say they are *not* affected by changes in the weather.

Significantly greater proportions of people from the Phnom Penh (12%) and Plain (8%) regions say their work is not affected by changes in the weather. This appears to fit with their responses concerning extreme weather. Fewer residents from Phnom Penh and Plain regions say they experienced an extreme weather event in the year preceding the survey. 99% of respondents from the Coastal region say their work is affected by the changing weather, and almost two-thirds (65%) of respondents from the Mountain region say their work is *badly* affected by the changing weather.

The youngest age group (15-24 year-olds) contains the smallest proportion of people saying their work is *badly* affected by weather changes. The oldest age group (45-55), meanwhile, contains the highest proportion of people whose work is *not* affected by weather changes.

More of those with lower education levels (73% of those with no schooling) and from the poorer PPI groups (73% from the 'poorest' PPI group) say their work is *badly* affected by weather change, while more of those from the two top PPI groups say that their work is *not* affected by changes in the weather (6.9% and 11.2%).

Water resources and climate change

Water access and quality

Respondents were asked whether they think access to and quality of water is improving in the area in which they live. Almost half think access is improving (47%) and a similar number (45%) think water quality is improving.^{35,36}

However, there are statistically significant differences across different groups. A greater proportion of men (26%) think that access to water is getting worse. Women's perceptions of water *quality* are more positive, with more women saying quality is improving (48%).

More urban respondents think access to and quality of water is improving (65% and 57% for access and quality respectively) and the same goes for respondents from the Phnom Penh (69% and 65%) and Plain (56% and 52%) regions. The picture is more divided among rural respondents. In relation to access to water, opinion is split fairly equally between the three possible responses. As for water quality, on the other hand, more rural respondents (30%) think it is getting worse.

Higher proportions of those with the lowest education levels (38% of those with no schooling) and from the lower PPI groups (37% of those with a PPI of 0-24) think that access to water is getting worse. In terms of access to water, more respondents with mid-range PPI scores (between 25 and 74) say it is getting neither better nor worse (62%).

More farmers say that both access to and quality of water is getting worse (35% and 31%). High proportions of respondents from coastal fishing communities say that access is getting worse, while a high proportion of respondents from freshwater fishing communities say that water *quality* is getting worse.³⁷

Water for personal use

Most people (79%) say that they have enough water for their personal use.³⁸ More urban respondents (89%), more of those from the youngest age group (83% of those aged 15-24) and more of those with higher education levels (94% of those with a university education) and higher PPI scores (94% of those with a PPI between 75 and 100) say they have enough water for their personal use.

³⁵ This study did not set out to measure water access or quality, but rather to explore people's perceptions of water access and quality in the area in which they lived.

³⁶ The Royal Government of Cambodia's 1998 census estimated that 29% of the population had access to improved sources of water. *National Census of Cambodia*, Royal Government of Cambodia, Ministry of Planning, National Institute of Statistics, 1998. In 2006 the UN estimated that this figure had increased to 65% of the population using improved sources of water. *World Population Prospects, the 2006 Revision*, UN Population Division.

³⁷ It should be noted that the 'booster' sample for coastal fishing communities cannot be considered nationally representative, as the respondents were purposively sampled. Due to the different methods used, we cannot compare this sample statistically to the total sample of 2401, nor to the results for different subgroups. As such, we will not include statistical results for the 'booster' samples in the body of this report. These results can be found in the full data tables contained in Appendix 2.

³⁸ For the purposes of this study, we defined 'water for personal use' as water for drinking, cooking and washing.

Importantly, there is not a difference between the responses of men and women in relation to the amount of water they have for their personal use. This finding does not reflect the views of some key informants interviewed for the qualitative research,³⁹ who are concerned that women will feel the impacts of a lack of water more sharply than men.

By contrast, higher proportions of people from Tonle Sap (24%) and Coastal (37%) regions, and more farmers, say they do not have enough water for their personal use. A substantial proportion of people from coastal fishing communities report that they do not have enough water for their personal use.

While the majority of people say they have enough water for their personal use, 67% say they lack the water they need to do their work. Higher proportions of respondents from Plain (75%), Coastal (65%) and Mountain (75%) regions say they do not have sufficient water for their work. More farmers (80%) say they lack water for their work, and a substantial number from coastal fishing communities say the same.

Water for work

More male (34%) and more urban (40%) respondents, and more of those from the younger age groups (35% of those aged 15-24) and the higher PPI groups (48% of those from the 'highest' PPI group) and with higher levels of education (50% of those with a university education) say that they and their family *do* have enough water for their work.

Health and climate change

For many respondents, the terms 'climate change' and 'global warming' are closely linked to concerns about an increase in disease. This confirms the findings of previous research.^{40, 41}

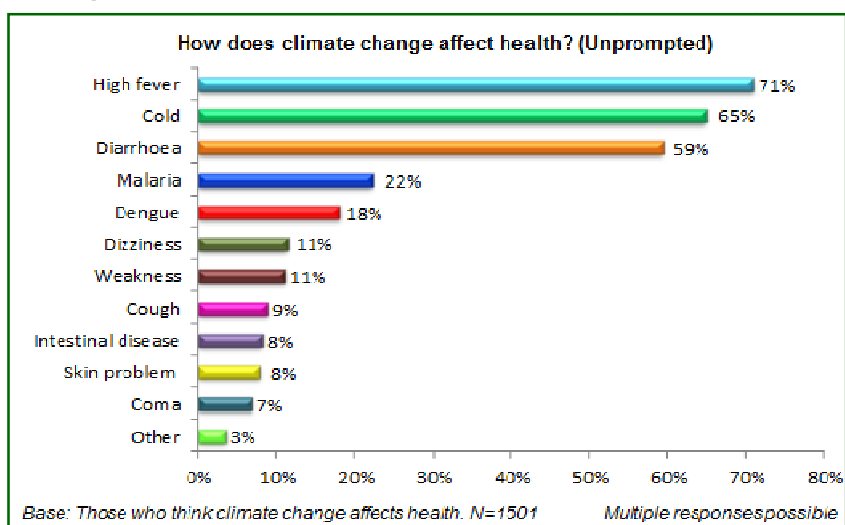
Given that health is seen by respondents as the highest priority for the country, it is important to understand the ways in which people connect climate change and health. (These connections will be explored further in the section '*What do key informants in Cambodia know and understand about climate change?*').

³⁹ See '*What do key informants in Cambodia know and understand about climate change?*', p48

⁴⁰ See *Indochina, iTrak, The Heat is On*

⁴¹ See Geres 2009. In general, people agreed that incidence of disease among humans and animals had increased. For humans, diseases such as flu, fever, coughs, stomach aches and intestinal illnesses, respiratory ailments, dengue fever and malaria were primarily discussed. The increases in disease were widely attributed to increased temperatures, rapid changes in temperature, water shortages, chemicals in food and poor sanitation, and in some places, the need for people to go and work in the forest. People in 2 of 4 provinces reported increased difficulty in treating diseases. In Prey Veng, there were reports that the supply of traditional medicines has declined.

Figure 17



22% of respondents say that malaria is a health change brought on by the climate and 18% say the same for dengue. Malaria and dengue sit in the middle of this table despite being the two health changes the science community would say are directly linked to climate change. Disease

Responding and adapting to climate change

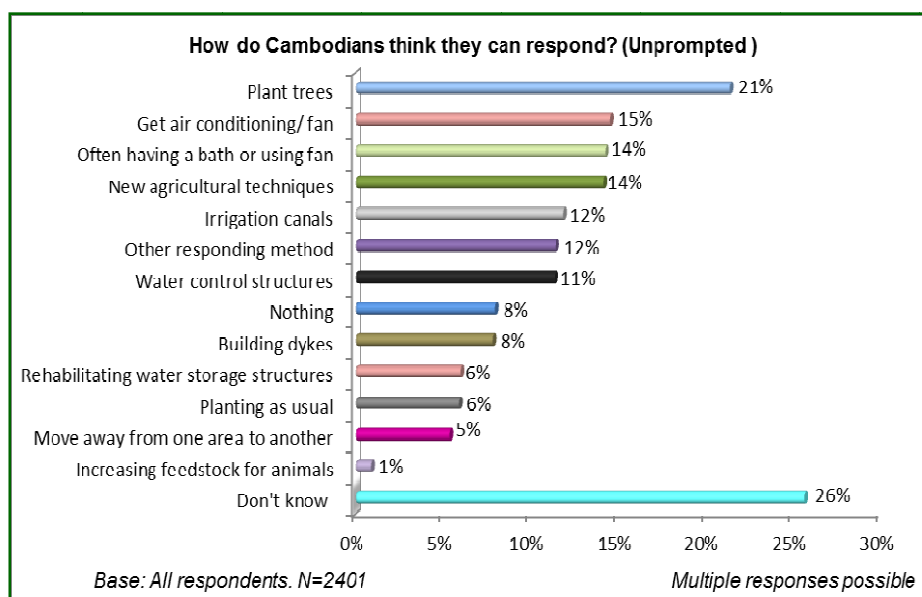
Key Insights

More than a quarter of Cambodians say they do not know how to respond to the changing weather, and a significant number say there is nothing they can do to respond. Although the majority says that they and their communities have already begun to respond, more than half say they do not have the information they need to do so. The youngest people (15-24) are significantly more positive than other groups on every measure of individual and community capacity to respond to the changing weather.

How do Cambodians think they can respond?

Respondents were asked unprompted how they think they can respond to the changing weather. Substantial proportions say that people can plant trees (21%) and develop new agricultural techniques (14%). The next most frequent responses concern ways of keeping cool, such as getting air conditioning (15%) or bathing and using a fan (14%). Other responses centre on water management, with people mentioning irrigation canals (12%), water control structures (11%) building dykes (8%) and rehabilitating water storage structures (6%). Of most concern, perhaps, are the responses 'do nothing' (8%) and 'plant as usual' (6%).

Figure 18



Nearly a third (33%) of respondents could not identify an action they could take to respond to climate change. Of the respondents who say they do not know what people can do to respond, higher proportions come from the Tonle Sap and Coastal regions, have lower education levels and are in the lower PPI groups. This group also contains higher proportions of working youth, farmers, housewives and more of those working in the professional, technical and management sectors.

Tree planting is suggested as a response by relatively higher numbers of men (29%), as well as higher proportions of Phnom Penh (26%) and Tonle Sap (31%) residents. Higher proportions of respondents from the youngest age group (26% of those aged 15-24) and from the higher education (51% of those with a university education) and PPI groups (29% of those with a PPI of 75-100) say that people can plant trees to respond to the changing weather. Perhaps unsurprisingly, given the higher numbers of the youngest respondents who mention tree planting, more university (46%) and non-university students (40%) suggest this course of action. Higher proportions of teachers (46%), government officials (38%) and those in professional, technical and management sectors (30%) also propose tree planting as a response.

The need to develop **new agricultural techniques** to respond to the changing weather is mentioned by more rural people (16%), many more Mountain residents (38%), more of those from the lower PPI groups (22% with a PPI of 0-24) and more teachers (28%).

More female and more urban respondents suggest **ways of keeping cool**, such as getting air conditioning (17% and 24% respectively). Females mention bathing more frequently and using a fan (16%). More of those with higher education levels and from the higher PPI groups also suggest that people can respond to the changing weather in this way.

A number of different approaches to **water management** were mentioned by respondents, and the profile of respondents for each approach differs. Higher proportions of men (14%), residents of Tonle Sap (15%) and respondents with higher education levels (20% of those with a university education) say that people can develop **irrigation canals**. Meanwhile, residents of the Plain region (19%) say that people can work on **water control structures**. More of those from rural areas (9%) and from regions other than Phnom Penh (9% from Plain, 8% from Tonle Sap and Coastal and 10% from Mountain) say that people could **build dykes**. Meanwhile, more men (8%) and respondents from the Coastal region (10%), and higher proportions of people with university education (14%) and from the highest PPI group (10% from the highest PPI group) say that people should **rehabilitate water storage structures**.

Two suggestions, the first that people can **'do nothing'** to respond to the changing weather, and the second, that they could **plant as usual**, are causes for concern. Higher proportions of people from Phnom Penh (18%) and Plain (15%) regions and skilled manual workers (17%) say that people can do nothing to respond to the changing weather. Meanwhile, the group of respondents suggesting that people plant as usual contains higher proportions of women (8%), of rural people (7%) and Mountain residents (24%), than the sample as a whole. It also includes relatively higher numbers of working youth (10%) and those from the youngest age group (8% of those aged 15-24), and of those with the lowest education levels (14% with no schooling) and from the lower PPI groups (14% of those from the 'poorest' PPI group).

What are Cambodians already doing to respond?

Respondents were asked whether they had observed anyone responding to the changing weather; whether they themselves and members of their family had responded, and whether members of the community had taken action. Almost three quarters (73%) of people say they or members of their family have done something to respond already. Just over half (55%) of people say that their communities have already begun to respond.

In urban areas, a higher proportion of people (76%) than in rural areas (71%) say they or a family member has already done something to respond to the changing weather. In rural areas, by contrast, more people (57%) say that they have seen responses within their communities than in urban areas, where 52% have seen responses within their communities.

In Mountain areas, more people than in other regions say that they have seen family members (78%) and their community (66%) taking action. More people in the Plain and Coastal regions say they have seen action in their communities. In Tonle Sap, however, a smaller proportion of people than in other regions say that they have seen their family or their community take action (68% and 44% respectively, compared to 73% and 55% for the total sample). A lower proportion of people from Phnom Penh region say they have seen people in their community respond to the changing weather (43%).

Among those with lower levels of education (37% with no schooling) and the lower PPI groups (31% from the 'poorest' PPI group), more people say that they have not seen

anyone in their family take action to respond to the changing weather. There are no significant differences associated with education level or PPI group in responses at the community level, however.

Community responses to the changing weather

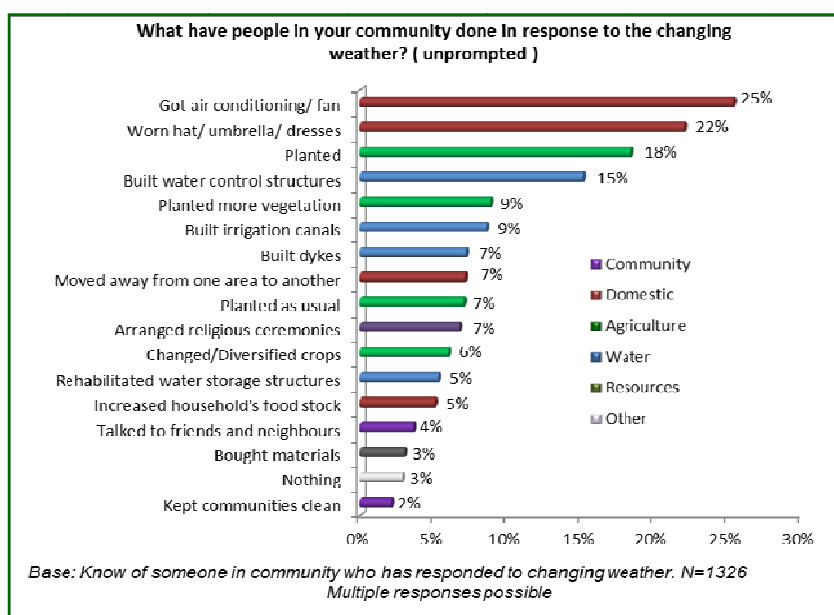
Those who have seen responses to the changing weather within their families and their communities mention similar responses within both groups. Ways of keeping cool, such as using air conditioning or fans and wearing long-sleeved clothing are mentioned most frequently in relation to family and community responses.

Certain responses to the changing weather appear more frequently in relation to action taken within the community, however. Work on water control structures, irrigation canals, dyke construction and the rehabilitation of water storage structures is observed more frequently at the community level. Planting more vegetation and changing or diversifying crops also appear more frequently at the community level, as does arranging religious ceremonies.



Source: BBC WST 2010

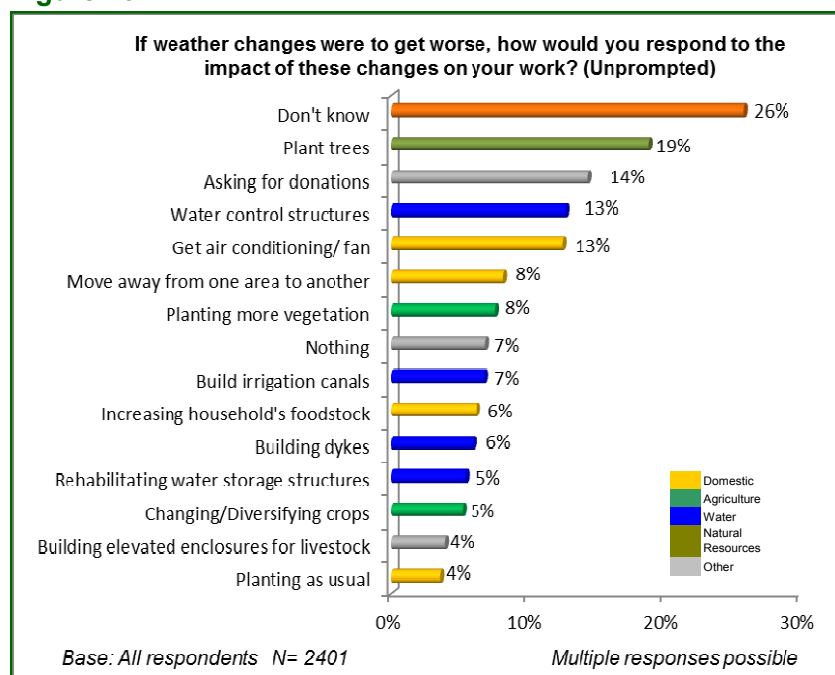
Figure 19



How people would respond to the impact on their work

Most people in Cambodia say their work has been affected by changes in the weather. One fourth (26%) say they do not know what they would do if weather changes were to get worse. This is the response mentioned most frequently by participants. Others say they would plant trees (19%).

Figure 20



Levels of self-efficacy and collective efficacy in responding to climate change

Respondents were asked whether they agreed or disagreed to a series of statements designed to assess levels of collective and self-efficacy in responding to climate change. From their responses, we can see that most people doubt their individual abilities, and the abilities of their communities, to respond to the changing weather.

When prompted, almost 9 in 10 people (89%) do not think that the changing weather brings any benefit to them or their family, and more than half think they are unable to respond to the changing weather (59%) and they cannot find the information they need to respond (52%). More women, rural Cambodians, poorer people and those with the least education say they lack the information they need to respond.⁴² People's perceptions of their communities' abilities to respond are somewhat less negative, but still present a worrying picture. Less than a third (31%) of people think that their communities can respond to the changing weather, with only 28% saying that their communities have the resources to do so. Just a quarter of people (25%) think that their communities are able to respond to drought and floods, while most say that their communities are unable to do so.

Positive perceptions of capacity to respond to climate change

The youngest people (15-24) are significantly more positive than other age groups on every measure of individual and community capacity to respond to the changing weather, with the exception of their communities' abilities to respond to floods. Similarly, more working youth (35%) and more non-university students (45%) think that their community is able to respond, and more non-university students say they can find the information they need.

More urban respondents say they can find the information they need and think their communities have the resources they need to respond. The same is true of respondents from the Tonle Sap and Mountain regions.

More respondents from the Mountain region think that their communities can respond to droughts and floods, and that their community is able to respond to changes in the weather more generally.

More of those from higher PPI groups and with higher education levels think they can find the information they need to respond. The same is true of government officials.

Resources needed to help people cope

People say they need money (25%), tools (18%), and government support (12%) to respond to the changing weather. 5% say they need information and 5% say they need knowledge in order to respond.

⁴² See table 54 in appendix 2.

Who is responding to climate change?

Knowledge of individual and organizational responses

Almost no-one knows of any organized response to the changing weather (93% of all respondents). The near total lack of awareness of any individual or organization working to respond to the problem suggests people are unaware of existing national and local programmes to respond to climate change and are currently making decisions about responses without receiving support from any source outside of their immediate communities.

Responsibility

Responsibility for the climate change response is ascribed to government (35% of all respondents), the Prime Minister (29% of all respondents), and NGOs (25% of all respondents). Less frequently mentioned, but still receiving more than 10% of mentions, are village chiefs and other local leaders (16% of all respondents), and the Cambodian people (14% of all respondents).

The role of the village chief or local leader is mentioned by more rural residents (18%) and people from Mountain areas (29%), and by more of those with the lowest levels of education (26% of those with no schooling) and from the lowest PPI groups (27% of those with a PPI of 0-24).

The responsibility of the Cambodian people is referred to by more urban respondents (18%), more residents of Tonle Sap (20%) and Mountain areas (18%), more of the youngest respondents (20% of those aged 15-24) and more of those with higher levels of education (34% of those with a university education).

Role of the Royal Government of Cambodia

Three-quarters (75%) say that the government can take action to respond to the changing weather. When asked to specify ways in which the government can help, respondents say the government can stop deforestation (48%), give them money (43%), work on irrigation (30%) and plant more trees (30%).

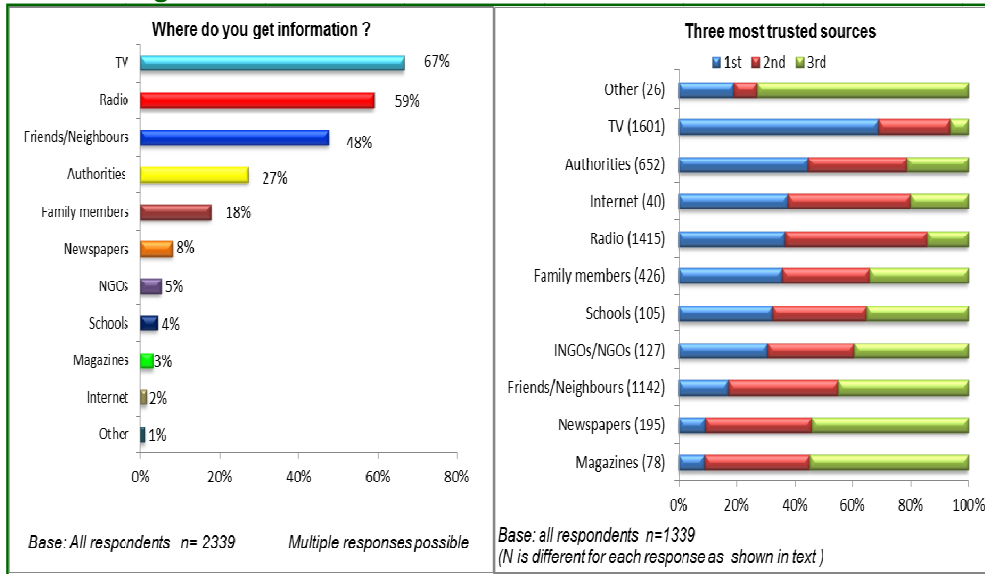
Media consumption and sources of information

In order to understand how to communicate to people on climate change, it is important to understand their media habits, as well as their perceptions of the topic. Having explored the ways in which Cambodian people understand climate change in the sections above, the report will now examine the levels of trust that are placed on a range of information sources, before presenting the media consumption habits of the respondents interviewed in the survey.

Sources of information

The most common sources of information are broadcast media and word-of-mouth through friends and neighbours. Of these three most commonly mentioned sources, broadcast media are trusted more highly than friends and neighbours.

Figures 21a and 21b



Friends and neighbours are a source of information for more of the younger people in the sample (67% of those aged 15-24) and more rural people (65%).

Women and rural residents, farmers, and more of those with lower levels of education and from the lower PPI groups say they receive information through authority figures.

Newspapers and magazines are read by greater proportions of younger respondents; 16% of those aged 15-24 get information from newspapers and 14% of those aged 15-24 get it from magazines. Greater proportions of better-educated respondents also obtain information from print media, with 59% of those with a university education reading newspapers and 40% of those with a university education reading magazines. More urban than rural residents read print media, with 22% of those from urban areas reading newspapers and 14% reading magazines.

Trusted information sources

The most highly trusted sources of information are TV, authorities, internet and radio. Of these, TV and radio are the most commonly used sources of information.

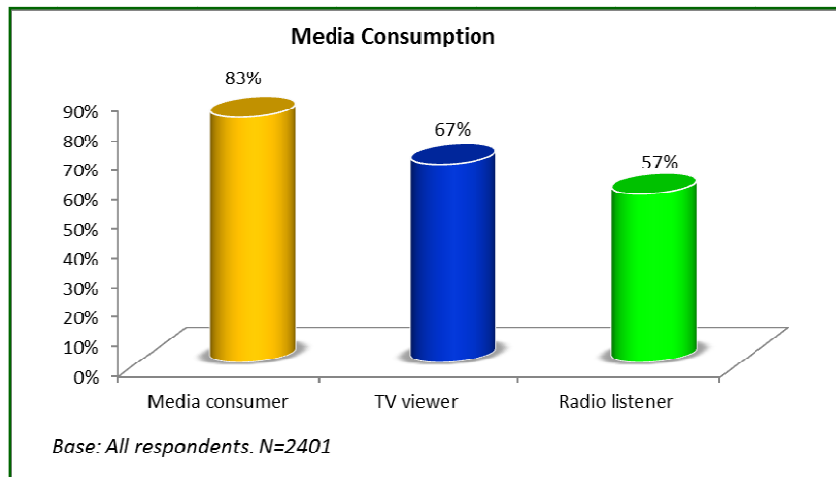
Newspapers do not compare well to broadcast media. Magazines are least trusted. These sources are most frequently used by residents of Phnom Penh, and by more highly educated and urban residents.

In terms of both use and trust, broadcast media (TV and radio) and authorities compare favourably with other sources of information.

Media consumption

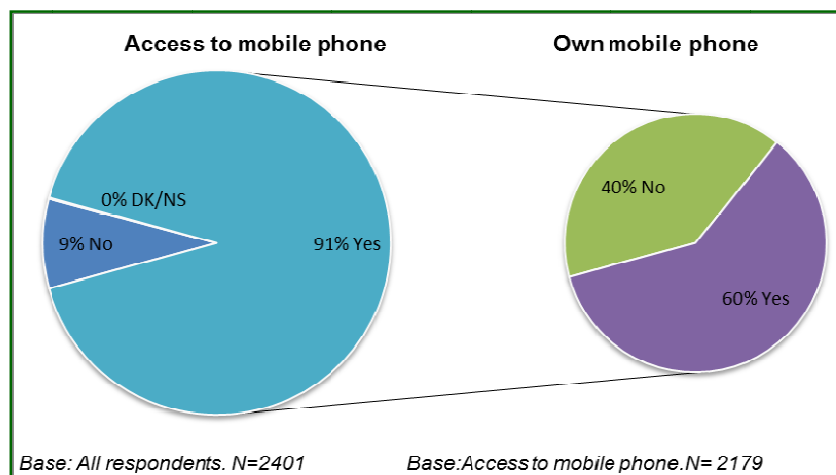
More than 8 in 10 Cambodians are media consumers.⁴³ Among media consumers, more people watch TV than listen to radio, and 17% of people consume neither radio nor TV.

Figure 22



Almost everyone (91%) has access to a mobile phone, with more than half (60%) owning their own mobile phone.

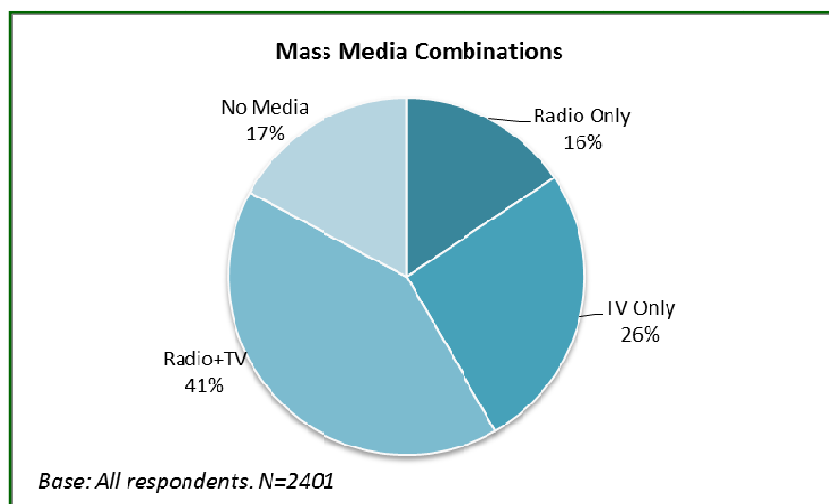
Figure 2



⁴³ For the purposes of this study, 'media consumer' is defined as someone who has watched or listened to either TV or radio, or both, at least once in the month preceding the survey.

Media combinations

Figure 24



Two-fifths of people (41%) consume both radio and TV. Around a quarter (26%) only watch TV, while a sixth of people (16%) only listen to the radio. Very few people (6%) have ever used the internet.

Radio habits

57% of people are radio listeners. Within this group, there are higher proportions of men (66%) and of respondents from the youngest age group (65% of 15-24 year-olds). People living in Coastal and Mountain regions (both 50%) are significantly under-represented in the radio listener group. More radio listeners have higher levels of education, with 62% of secondary-educated, 71% of high-school educated, and 75% of university-educated people listening to radio. Those with a PPI score of 50 to 74 are also over-represented in this group.

News programmes are by far the most popular, with 84% saying they listen to news the most. Besides news, song programmes are also popular. 49% say they tune in to general songs programmes, while 37% say they listen to song request programmes. Education and health programmes also attract a substantial number, with 21% and 17% of listeners respectively. Environmental programmes attract an extremely small audience.

News listeners are more male (91%), more urban (87%) and more are aged between 25-44 (87%).

Song programmes appear more popular among rural (51%) and male (52%) audiences, and song request programmes are most popular with the youngest listeners (50% of those aged 15-24).

More urban listeners (25%) listen to educational programmes, and more women (23%) listen to health programmes.

Radio stations

The top 4 radio stations among Cambodian audiences are:

- Radio Bayon (all channels) **28%**
- Municipal Radio 103 FM (Phnom Penh) **20%**
- WMC Radio 102 FM (Phnom Penh), Svey Rieng (94.5 FM), Kompong Thom (102.2 FM) **13%**
- Sambok Khmum Radio 105 FM (Phnom Penh) **10%**

It is important to note that 18% of people cannot remember the name of the station(s) they listen to.

Radio listening by duration and time

55% say they listen to the radio every day. The most popular days, however, are at the weekend, with 69% tuning in on a Saturday and 72% listening on a Sunday.

More men and more urban residents listen on a Saturday and Sunday. Proportionally more older people (45-55) listen to the radio every day.

The most popular listening time is between 6am and 8am, when more than half (53%) tune in. Substantial numbers listen throughout the evening, concentrated between 6pm and 8pm (37%) and tailing off between 8pm and 10pm (27%). The 12 to 2pm lunchtime slot is also popular, with 29% of listeners tuning in at this time.

Significantly fewer women than men tune in to the two popular evening slots. (43% and 31% of men tune in between 6pm and 8pm and 8pm and 10pm, respectively, compared to 29% and 21% of women.)

More urban listeners (57%) than rural listeners tune in to the early 6am to 8am slot, whereas more rural (32%) than urban tune in to the lunchtime 12 to 2pm slot.

Younger people tune in slightly later (19% tune in between 8am and 10am), and more of them listen between midday and 2pm (34%) and 2pm and 4pm (15%) than any other group.

Most listeners tune in once (48%) or twice (36%) a day, listening for up to an hour at a time. (42% listen to radio for up to half an hour, while 38% listen for between half an hour and an hour.)

The youngest listeners (15-24 year-olds) listen most frequently, with more of them listening 3 times a day than any other age group.

Women's listening patterns appear to be split. More women than men listen for half an hour or less, and for more than 2 hours.

More 35 to 44-year-olds are likely to listen for less than half an hour a day.

Phone-in programmes

Phone-in programmes are popular, with three-quarters (76%) tuning in to a phone-in in the month prior to the survey. They are most popular with women, rural audiences and with younger listeners.

Calling in to a phone-in

Although most people listen to phone-ins, less than a sixth of people (14%) call in themselves. The youngest listeners are more likely to call in (17%).

Of those who have called in to a programme, most say they called to request a song (54%), while others say they called to discuss health problems (20%) or to debate social problems (19%).

Calling in to request a song is most popular among the youngest listeners (66%), while five times as many men (28%) as women (5%) call in to debate social problems.

TV habits

Approximately 67% of Cambodians are TV viewers.⁴⁴

Among TV viewers, there are more men (74%), more urban respondents (91%), more of the youngest respondents (72%), and the highest proportions of TV viewers are among those with higher levels of education. There are significantly fewer Mountain viewers (50%).

The most popular types of programme are:

- International TV film series 77%
- News 76%
- Concerts and comedy 62%
- Khmer series 52%
- Sports programme 38%
- Song programme 23%

As with radio programming, environmental programmes attract an extremely small audience.

International film series and Khmer series are more popular among women (83%, 65%) and younger respondents (82% and 60% respectively for respondents aged 15-24).

News is more popular among male respondents (83%) than female respondents.

Sports programmes are most popular with men (57%) and with respondents from the oldest age group (45%).

⁴⁴ For the purposes of this study, we have defined 'TV viewer' as someone who watched TV within the month prior to the survey.

Concerts and comedy (69%) and song programmes (31%) are most popular among the youngest respondents.

TV viewing by duration and time

Most people watch TV at the weekend, with 80% tuning in on a Saturday and 81% on a Sunday. Thursday and Friday are the least popular days, attracting 70% of viewers.

Most (55%) watch TV once a day, with most watching for more than half an hour. (42% say they watch for between half an hour and an hour, while 36% say they watch for more than an hour.)

Most TV viewers (66%) watch between 6pm and 8pm in the evening, with more than half (52%) viewing between 8pm and 10pm. A quarter (26%) tune in for the lunchtime slot between midday and 2pm.

Men tune in earlier than women. Twice as many men (25%) as women (13%) tune in between 6am and 8am.

More of the youngest group (15-24), watch in the morning and early afternoon, when 33% of them tune in between midday and 2pm. More women (29%) and urban (34%) also tune in during the 12-2pm slot.

TV channels

The most popular TV channels in Cambodia are:

- CTN 74% - urban
- Bayon TV (TV 27) 69% - urban
- TV5 (Khemarak Phomin TV) 57% - more rural

Then, the following channels all attract a third of TV viewers:

- Municipal TV (TV3) 36%
- SEA TV 35%
- My TV 35% - younger age groups, urban respondents
- National TV (TVK) 33%
- Khmer TV (CTV9) 32% - more rural

Two channels attract substantial numbers, though not as many as those listed above:

- Apsara TV (TV11) 25% - more rural
- Bayon TV (recent) 14%

Almost all TV viewers can remember which channel they watch, unlike radio listeners.

Mobile phone use

91% of Cambodians have access to a mobile phone, and more than half (60%) own their own mobile phone.

Mobile phone access

There are no significant differences between men and women in relation to access to a mobile phone.

Higher proportions of urban residents, and those with higher education levels and from the higher PPI groups, have access to a mobile. Indeed, 100% of university-educated respondents have access to a mobile.

Respondents from the Mountain region have least mobile access, with only 82% able to access a mobile phone.

Mobile phone ownership

60% own a mobile.

More men (69%), urban residents (70%), and those with higher education and from higher PPI groups own mobile phones.

Far fewer women (at 50%, almost 20 percentage points lower than the figure for men) own mobiles.

Lower rates of phone ownership are also found among residents of Tonle Sap (52%) and Coastal regions (58%), the youngest respondents (56%), and those with lower educational levels and from lower PPI groups.

How do non-mobile users access telephone services?

Relatives (30%) and phone booths (23%) are the most common mentions. Phones belonging to spouses (13%), friends (8%) and neighbours (6%) are also used.

More rural residents (32%), and those living in regions other than Phnom Penh and Plain (at 17% and 23% respectively, fewer people from these regions rely on relatives), use a relative's phone. Many more of the youngest respondents (42%) use a relative's phone, as do those with lower education levels and from the lower PPI groups.

Many more Coastal residents (38%) and more of those from the lower PPI groups rely on phone booths for telephony services.

Far more women (23%) than men (3%) use their partner's phone. More of those aged 25-44 use their spouse's phone, as do those with lower education levels. Perhaps surprisingly, more of those from the higher PPI groups say they use a partner's phone. More of those from lower PPI groups rely on neighbours and relatives, as well as phone booths (around 10 percentage points above the average for each response among those from the lowest PPI group).

More male (11%), more urban (9%), and more of the youngest respondents (15%) and working youth (12%) say they use their friend's phone.

More rural (8%), Coastal (7%) and Mountain (10%) residents, and those with lower education levels and from the lower PPI groups say they use a phone belonging to a neighbour.

Mobile phone networks

Mobitel and Metphone are the top 2 mobile phone networks, each mentioned by 52% of respondents. There are important differences, however, in the profile of the users of each network.

More men (55%) than women (47%) use Mobitel. There are no significant gender differences for Metphone.

There are no significant differences between urban and rural users.

However, Mobitel appears to have a significantly lower presence in Coastal and Mountain regions (28% and 31% respectively), while Metphone has a significantly higher presence in these areas (62% in Coastal and 67% in Mountain regions).

A higher proportion of older people uses Mobitel (57% of the oldest users, against 39% of the youngest users), while a greater proportion of younger people uses Metphone (62% of the youngest users, compared to 39% of the oldest users). Importantly, those from the lowest PPI group tend to use Metphone (69%), while those from higher PPI groups use Mobitel.

A higher proportion of working youth uses Metphone (60%).

Mobile phone functions

All of those with access to a mobile phone use it to make and receive calls.

Beyond the call function, people use phones to:

- Listen to music 60%
- Play with ring tones 50%
- Take photos 47%
- Send and receive SMS 45%
- Play games 39%
- Play with call tunes 33%
- Listen to radio 33%
- Record audio 29%

Very few use their phones to access the internet (5%).

Messaging

Of those who use a mobile's messaging function, most (82%) use it to send SMS using English characters. Almost 4 in 10 (39%) send template messages, and more than 2 in 10 send messages in Khmer.

More urban people (92%) send English SMS.

More rural people send Khmer SMS.

More men (42%) and more of the younger age groups, particularly 25-34 year-olds, send template SMS.

Although almost half of all respondents say they use mobile phones to take pictures (see *Mobile phone functions*, above), very few (2%) currently send pictures by SMS.

Print media

Detailed questions were not asked about print media consumption. However, print media clearly has a far more limited reach than TV and radio, with only 12% saying they ever read newspapers, and just 9% saying they read magazines, for information.

Similarly, when asked whether they used any information sources not contained in the list used to prompt this question, less than 2% chose to mention additional sources of information. Given that other forms of print media – flyers, leaflets, posters, and so on – were not mentioned in the prompt list, this indicates that less than 1%, if any, respondents spontaneously recalled these media formats.

Internet Use

Very few people (4%) have used the internet. Of these, many more live in urban areas (8% of urban residents say they use the internet) than rural areas (where less than 2% say that they use the internet).

The profile of internet users is young, urban and highly educated and from the higher PPI groups. A greater proportion of internet users is found in Phnom Penh, although there are some users in every region.

Internet users mostly log on in order to:

- Find information 73%
- Get news 65%
- Use email 57%

People use the internet:

- In internet cafes 59%
- In the office 26%
- At home 15%

DVD and VCD

DVDs are popular, with 59% saying they have watched a DVD or VCD in the past month, and 33% using DVD/VCDs on the day of, or the day prior to, the survey.

They are mostly used to watch:

- Movie series 89%
- Songs 71%
- Comedy 35%

Most people watch DVD/VCDs at their own house (65%), with friends (26%), with relatives (19%), or in coffee shops (16%).

Outreach Activities

More than half (56%) of respondents say they were involved in outreach activities during the month preceding the survey. Only 15% say they have never been involved in outreach.

Outreach preferences

Different outreach activities appear to attract different audiences.

Women prefer activities using show cards (33%), or education in the home and with their families (25%).

Educational plays are more popular with the youngest respondents (29% of those aged 15-24), and by those with high school education (30%).

Workshops are more popular with urban respondents (17%) with higher levels of education (44% of those with a university education) and from the higher PPI groups (20% of those with a PPI of 75-100).

What do key informants in Cambodia know and understand about climate change?

This research draws on 101 interviews with key informants from 20⁴⁵ different provinces:

- 5 government representatives
- 5 parliamentarians and senators
- 5 provincial governors
- 20 commune council leaders
- 30 village chiefs and elders
- 5 celebrities
- 6 industry representatives
- 5 media representatives
- 5 NGO representatives
- 15 religious leaders

The following analysis is based on the findings from the 101 interviews. The quotes that are used to illustrate the findings were selected from the 101 interview transcripts using

⁴⁵ The four following provinces are not represented: Svay Rieng, Stung Treng, Banteay Meanchey and Ratanakiri.

Atlas.ti coding software and reflect interesting and prominent themes emerging from the data. To protect the anonymity of interviewees, their names are not included in the analysis. Some of the views presented here indicate misconceptions held by certain individuals or groups and do not reflect the views of the Trust or the Ministry of Environment. (See Appendix 1 for more detail on the Methodology.)

Understanding climate change

Few key informants have a detailed understanding of the causes and effects of global climate change. Terms such as ‘greenhouse gases’ or ‘carbon emissions’ are used infrequently, suggesting that key informants’ knowledge of the scientific basis for climate change is limited. Few people outside national government and NGOs mention international political milestones such as the UNFCCC treaty, the Kyoto protocol or the Conference of the Parties (COP 15) in Copenhagen in December 2010. Instead, their explanations of the term ‘climate change’ are largely informed by their personal experiences of weather changes in Cambodia, and their observations of localised environmental degradation.

Awareness of the terminology

Almost every key informant interviewed for the research says they have heard the term ‘climate change’. This term appears to be more familiar to people than ‘global warming’, which some say they have not heard before.

Although the terms ‘climate change’ and ‘global warming’ are familiar to most key informants, the meaning of these words is not widely understood. As one government representative says,

Politicians use the term ‘climate change’, but it doesn’t clearly indicate the cause and effect of climate change. We just feel that it is hot or cold, or we know that there is flooding, for instance. But this word doesn’t tell us about the effects of climate change, or who will be affected by climate change.

Few have heard of the terms ‘greenhouse effect’ or ‘greenhouse gases’. Considerable confusion surrounds these terms, even among key informants who use them spontaneously and have detailed technical knowledge of the causes and impacts of climate change. This confusion appears to stem from the Khmer translation for the greenhouse effect, *Phal Ptash Kanhchork* (See *Translating Climate Change*, **pError! Bookmark not defined.**). This is understood to refer to a ‘glass house effect’ – and few Cambodians have ever seen a greenhouse. This leads to a number of misapprehensions.

In English it is called a “greenhouse”. Why don’t we translate it directly? I do not understand why we call it “glass [house]” the translation does not give it its meaning. I heard this term when I was in university I thought that the greenhouse effect was heat from glasses [laughs].

Government representative

There are a number of other misconceptions as well, the most common being the erroneous connections drawn between the expressions 'climate change', 'global warming' and 'greenhouse effect' and people's knowledge of the depletion of the ozone layer.

The earth is being protected by the ozone layer. The ozone layer is the 'glass'. Meanwhile the term 'greenhouse' refers to a kind of nursery. It's for when people grow plants, they have to keep them under glass to keep them warm. It is similar to the earth. The sunlight that has shone on the earth can't reflect back through the ozone layer. Therefore, warming is increasing.

Industry representative

Key informants say they have heard the terminology from a variety of sources. Almost all opinion leaders say that they have heard the term 'climate change' through TV and radio. Many mention both national and international media as a source of information on the subject.

Some mention newspapers as a source, and a few say they have used the internet to find out more about the subject. Some village chiefs and elders point out that they have limited access to media.

Non-media sources of information include the Cambodian Ministry of Environment, the Cambodian Red Cross, NGOs (the World Wildlife Fund and World Vision are mentioned by name), workshops, personal observation and word of mouth. As one provincial governor explains

:

I live here, so I can see it with my eyes, and then I hear about it from other people, as well...I have heard about this from people in all five districts, as well as [the provincial] town. They are always complaining about climate change.

Commune council leaders and village chiefs frequently say they have heard about climate change from older members of the community:

I heard [about climate change] from the older generation. They always say that it did not happen in the past.

Commune council leader

Many government representatives, industry and NGO representatives have heard about climate change through their work.

Perceived causes

Many key informants have seen or heard coverage of extreme weather events in the national and international media. They connect high temperatures in India, drought in Africa and the melting of the polar icecaps to the term 'climate change'. Some also describe earthquakes, tsunamis and volcanic eruptions as impacts of climate change.

All key informants make a link between climate change and deforestation:

Forest loss causes climate change .It leads to a lack of rain, and then the heat increases

Commune council leader

Key informants' understanding of climate change, drought and deforestation are interlinked, as the words of one village elder illustrate:

Global warming means whatever is damaged and worn out causes the [temperature] to change. This is what I think and see actually. Take the case of the northern forest. In the past, the forest was too thick to walk through, but now, just looking at the location, you can see it is all open air, you cannot see any trees, not a single tree. As for the cattle herds, they once tended the cattle and sheltered under the trees, and the cattle ate grass and leaves by the hills. Now, there is not one tree to shelter beneath.

Village elder

Most connect climate change to localised pollution from industry, motor vehicles and other machinery; the use of chemicals, particularly fertilizers; and the production of smoke, particularly from cars and other motor vehicles:

It is because there are many factories, machines, cars producing smoke According to what I have observed, [global warming] is caused by many machines that produce smoke. When [the smoke] reaches the clouds, it comes back down...

Only some key informants, mostly national government and NGO representatives, make direct links between the causes and effects of climate change at the global level:

We have contributed [to climate change], but we are not taking responsibility because we have just begun to emit, unlike.... developed countries, which have been emitting since the eighteenth century. They have produced too many emissions.

NGO representative, Phnom Penh

Some key informants from across the different groups inaccurately link 'climate change' and 'global warming' to the depletion of the ozone layer, rather than correctly connecting it to the greenhouse effect:

All countries have created electricity. All factories have produced smoke [which] destroys the ozone layer...It has caused the ozone layer to become thinner... The temperature is very hot when the ozone layer is very thin. That is climate change.

Commune council leader

Some key informants from across Cambodian society, of Buddhist, Christian and Muslim faiths, draw on their religious belief to explain the concept, as the words of one government representative illustrate:

We should appreciate the [words of] Buddha, who predicted around 2500 years ago that the world would burn and everything would be destroyed. There is no one wiser than the Buddha, as we can see the climate is changing from day to day. My generation will only live another thirty or forty years, but the next generation [has] to think what they need to do every day to protect the earth and to respond to climate change. You must do what you can, because few people understand this.

Government representative

Some of the explanations provided by some village chiefs, commune council leaders, religious leaders and provincial governors suggest they are not as well informed about climate change as those in national government. Some of these key informants perceive that mobile phones and mobile transmitters, weapons and atomic bombs could play a role in altering the weather.

I want to tell you what humans have done to cause climate change. For example, people have created missiles. They have contributed to climate change. They have created atomic bombs. These have affected the climate as well, because they contain chemicals. They have affected the climate. In addition, transmitters have affected the climate. There are many mobile phone transmitters in our country.

Provincial governor

Perceived impacts

Almost all key informants say they have observed weather changes over the course of their lifetimes. These include less predictable seasons, diminished rainfall, hotter temperatures, more storms, more frequent and severe flooding, and more frequent thunder and lightning. Key informants working in coastal areas mention more frequent flooding and higher sea levels. Several say that water levels in the Mekong are unusually low, or that they have been fluctuating unusually in recent years. The comments of many key informants living in rural areas suggest that changing weather patterns may be overturning traditional ways of understanding weather:

In the past, we could predict rainfall without having to listen to the weather forecast. Now, we cannot predict it, even when we see dark clouds, heavy wind and hear the sound of thunder.

Religious leader

All key informants are concerned that the weather changes will have a negative impact on agricultural production, and that this will have implications for food security. A considerable number of key informants say that climate change will have a negative impact on people's livelihoods and should be considered as a barrier to addressing poverty. They also connect hotter temperatures, diminished rainfall and water supplies, and greater food insecurity, to an increase in disease. Diarrhoeal disease, particularly, is frequently mentioned:

Diarrhoea, malaria, cholera as you hear on the radio, in recent months in some provinces there has been bad cholera which has caused many deaths. Because of a lack of hygiene and sanitation, or when there is heavy rain in that area or drought, people drink water from any source that they can find, often untreated sources, because there is a water shortage in rural areas.

Religious leader

Although many are concerned about the potential impacts of climate change in Cambodia, most think that the country is not yet as badly affected as other countries. Even among those with a limited understanding of the concept of climate change, there is a feeling that Cambodia will eventually experience its impacts, as other countries have done already:

It has not so far impacted Cambodia, [so] it has not been an attractive issue [in the media] We were always worried when we heard [about climate change in] sub-Saharan [Africa]. But now it is not just the Sahara. Now it is near Beijing. So people are worried that soon it will arrive at Wat Phnom.

Media representative

How does the public perceive climate change?

Many key informants identify a ‘knowledge gap’ within Cambodian society that they think influences the public perception of climate change. As one media representative explains:

Urban people know about it. [They] know a lot about what has caused the hot weather because they have read newspapers and magazines But for rural people, they only know about their [own] experience.

Media representative

Beyond the question of access to information, key informants make two clear distinctions between the ways in which the public perceive climate change. Some key informants focus on whether the term ‘climate change’ is well understood. Others, meanwhile, explain that the largely rural population has an experiential understanding of climate change: that they are already living with its effects.

On the subject of terminology, many key informants point out they do not understand it themselves. Others think that the translations in Khmer do not adequately convey the meaning of the term. Some point out that ‘*akas theat*’ does not convey the term ‘climate’. One Cambodian celebrity identifies a challenge that is alluded to by others when he says that the term ‘climate’ sounds ‘a bit technical’.

Other key informants approach the question differently. They explain that Cambodian people have observed changes in the weather over time, but that they do not perceive that these changes could be part of a larger problem. As one media representative says, ‘people have started to recognize that there is a change, but they do not know why there is a change’. A commune council leader observes:

Generally, people know about the temperature increasing. They are always complaining that the rain is not regular now... It is very hard to live. They understand about this situation, but they might not understand our language. They say that the weather is abnormally hot now, that now there are many kinds of insects that have come to destroy their crops. They are using that kind of language every day. It means they have understood that the climate has changed.

Their comments indicate that most key informants agree with this analysis. Some say that the public would understand climate change if more were done to connect the term 'climate change' to its effects. As a representative from one Cambodian NGO explains:

I'd like to tell them about [the] effects of [climate change]. That way, it is easy for them to understand. For example, we could spend a day explaining climate change to them and they wouldn't understand. Instead, we should ask them why there is no rain, and why the temperature is so high, and what the reasons are.

NGO representative

The challenge of understanding climate change is not just relevant to people living in rural areas, however. One NGO representative working on climate change explains that it is hard to find documents on the subject in Khmer language, even with access to the internet. One celebrity who has a relatively strong grasp of the issue explains:

I am always chatting with people about [climate change], and assessing their knowledge and concern. I am a teacher, a ceremony master, and an internet user, [and even] I have not understood about it very well.

Celebrity

Where does responsibility lie?

Key informants who connect global climate change to greenhouse gas emissions emphasise that responsibility for these emissions lies mostly with industrialised countries:

Any countries that have more population, a healthy economy, more factories [has contributed to climate change]. They have contributed a lot to causing climate change. We are a poor country. We have not developed anything. We are the victims of climate change.

Government representative

When asked directly whether Cambodia has contributed to climate change, or where responsibility lies for causing climate change, other key informants allude to the responsibility of industrialized countries for climate change, frequently in vague terms:

Rich countries created the problem. They should be worried. (...) Those countries should help us to make sure that we will not repeat their history.

NGO representative

The focus of most explanations of the causes of climate change, however, is deforestation within Cambodia. Responsibility for the loss of trees is largely attributed to people in rural areas who cut the trees to clear the land for agriculture, burn the wood for fuel, or to sell as charcoal or firewood.

Although responsibility for tree-cutting is ascribed to rural people, most key informants recognise that the reasons for the loss of forest are complex. Some allude to the massive deforestation that occurred from 1979, while others explain that poor rural people depend on selling firewood and charcoal to supplement their livelihoods. They draw a connection between poverty and tree-cutting.

Others explain that laws to prevent illegal deforestation are not enforced:

[The government] keeps telling people to stop cutting the trees, but people are still cutting them. And other people are planting. We have laws but people do not follow the law.

Village chief

Climate change is frequently conflated with more general environmental degradation and pollution. In this respect, climate change is linked to a lack of appropriate strategies to manage the environment. Specifically, key informants mention poor waste management systems, and pollution of waterways by sewage and chemicals.

The more the population grows, the more waste is produced and flows into the river. People get sick with cholera when they use this water. Excrement and urine are discharged into the river directly because there are no toilets by the river.

Village chief

There is also a general feeling that Cambodia's natural environment is at risk of exploitation from industrialised nations. This is sometimes alluded to through references to excessive material consumption and production:

The earth has been weakened by human consumption and mismanagement, affecting the climate and environment.

Religious leader

A few express concern that Cambodia is contributing to climate change and damaging the environment by importing 'second hand products' such as cars and motorbikes, that people in other countries no longer consider fit for use:

Another cause [of climate change] is that we import second-hand products, which affect the local environment. If they are old, they are sure to affect the environment. Some examples of these second-hand products are motorbikes and cars. In other countries, people stop using them, but we import them, without tax payment, into Cambodia. The smoke from those motor vehicles is dark and contains polluting gases.

Provincial governor

What response is required?

Key informants identify several important barriers to responding to climate change. Most say that a lack of information on climate change means that they themselves do not know how to support people in their organisations or communities to address the problem:

I do not know what resources I need because I do not understand [about climate change]. But I think the best resource is knowledge.

Commune council leader

Many explain that the number of competing concerns, at both the level of government and within people's lives, mean that climate change is not treated as a priority:

There are many problems [here], as Cambodia is a developing country. So health problems and food security are the most important problems, [and also] HIV and AIDS, malaria. But they are not as important as climate change.

Buddhist leader

We have not [yet] had any educational campaign. And the policy is only operating at the highest level. At the grassroots level, people are too busy with concerns in their daily lives. They are thinking about utility fees, money, inflation, corruption, and so on. They have to think about many things related to their daily lives. So they don't have time to think about the climate change issue. People do not think about it at all.

Media representative

Financial challenges are one of the main concerns identified by key informants. A considerable number, including NGO representatives and government officials at every level, describe the mutually destructive relationship between climate change and poverty, with one frustrating attempts to address the other:

We can't compare [climate change] to other issues because it is a cross-cutting issue and it has to be solved among other issues. For example, if we are talking about poverty, it has to be included in this issue, because climate change is also a factor that causes poverty.

Government minister

National government representatives frequently point to a lack of sustainable financial resources as an obstacle to planning the national response to climate change.

We want to stabilize the finances and we don't like the way that we have to base [budgets] on funding from donors for only a short period of time. So we must allocate a budget for climate change [without depending on donor approach or donor base], in the same way that I have designed social protection projects without depending on donor funding.

We want the government to approve the budget annually from the Ministry of Finance. For example, the Ministry of Finance should allocate 10% of GDP for climate change projects. This is what we want to see in the future.

Government representative

One media representative says it is also a barrier to responding to extreme weather events:

It is dangerous for low income countries like our country. If we were to experience a serious disaster, it would be hard for our country to recover. We could not do what Thailand did when it had the tsunami. It recovered its economy after only two years. We can't do that. We are not the same to other countries around us. Vietnam has a lot of money in the bank. We can see that Vietnam does not care much when it had floods. If floods destroy their roads today, they will reconstruct them right away tomorrow. But for us, we can't do that. We have to request support from international partners or neighbouring countries. It is not easy to rely on someone [else's] money.

Media representative

Most feel that knowledge of the issue is confined to the national government, and is not yet reaching other groups. As an NGO representative explains, *'we have information in the ministry, but dissemination is very limited'*. Many key informants look to the government to lead the response to climate change and most say information provision should be central to this response. Many key informants say that representatives from every level of government need to be involved, particularly those responsible for leading communities. Most key informants think that the media has an important role to play in the national response and say that radio and TV spots should be used to provide information to people.

Key informants on climate change: by group

Government representatives, senators and parliamentarians

Cabinet members and their representatives are among the key informants with the highest levels of technical expertise on the subject of climate change. Comments from key informants more generally, however, suggest that the technical and political expertise within this sector has not yet been disseminated widely enough to reach people working at the local, province or district levels.

The perceptions and preoccupations of government members and their representatives, of senators, and of parliamentarians are similar in many respects. As such we shall consider them as one group for the purposes of the research.

The government members and their representatives interviewed for the purposes of the research are among the key informants with the highest levels of technical expertise on the subject of climate change. Almost all national government representatives appear to have extensive knowledge of government programming on climate change, and can

describe coordination initiatives within national government in detail. Some of them are aware of the international political aspects of the climate change debate, such as the Kyoto protocol, and the Conference of the Parties in Copenhagen held in December 2009. However, comments from key informants more generally suggest that the technical and political expertise within this sector has not yet been disseminated widely enough to reach people working at the local, province or district levels.

The government representatives have a strong grasp of climate change terminology, distinguishing between the meaning of terms such as 'climate change' and 'climate variability' and referring to the 'greenhouse effect' unprompted during the course of the interview. One government representative gives one of the most accurate definitions of the greenhouse effect provided by any key informant interviewed:

It is like a shield that protects [the earth] from sunlight. It is made up of many gases. The core gas is carbon dioxide. People are paying attention to carbon dioxide. Why are people paying attention to it? Because it has increased warming. Normally, when the sunlight shines on the earth, some [has] been reflected back into the atmosphere. But what has caused the warming on the ground? It is caused by carbon dioxide. [Now], when the sunlight shines on the earth, it is not reflected back out.

Government representatives appear well-placed to view climate change as a problem that cuts across many areas of political life, and this is a theme that is frequently touched upon. Most perceive that government efforts to coordinate the response to climate change are necessary to address an issue that they perceive to be cross-cutting:

The priority problems will be different from one institution to another. The important thing is that we should have a unifying mechanism in order to make the problems go together, because each problem cannot be separated from the other.

We would like to see climate change [treated] as inter-sectoral. Not just as the work of the Ministry of Agriculture, Forestry and Fisheries, for example, or the Ministry of Water Resources and Meteorology, or the Ministry of Environment, but as inter-sectoral.

Certainly, there is evidence that many different government departments have taken this message to heart, as illustrated by the comments of one government representative in relation to the need for a 'green economy':

I'm not talking about the green economy yet, but [ecotourism] could also contribute to the green economy. If we can implement it well and earn a lot of money from ecotourism, we can consider it as part of the green economy. But talk about the word 'green economy' has not gone far enough yet. It should include green jobs and other things, such as hotels. They should stop using electricity and private generators and use solar energy or wind power instead.

One government representative explains why coordination is so essential:

The government has many objectives, but we have tried to collect these objectives together in one place. The first objective is to respond to emergency needs. For example, when there is a flood, storm or drought the government will have to respond immediately to people's needs by distributing food... When a road is cut off, we have to reconstruct it. These are related to climate change and natural disasters. The second objective is supporting maternal and child health. I do not think this objective is much related to climate change. The third objective that we are working hard on is the public works programme. For instance, for people who don't have jobs in one place because they have experienced drought. Drought has an impact on the agricultural sector, so people will force themselves to migrate to other places. We do not want people to migrate, so we create occupations for people where they live. Local occupations will help to improve the agricultural sector and other related sectors. If we build rural roads, people can access rural areas from urban ones. One example is that if we build the road, we have to think about the climate change scenario. Normally floods come up to one metre, so we construct roads at heights of one-and-a-half metres. [So] we will construct the road at heights of two metres to cope with the changing floods. We also have land use planning for reforestation. The fourth objective is also important for climate change and it is related to public health. I believe that one indication of climate change is the outbreak of malaria. If we have a lot of malaria outbreaks, it means that climate change is more and more serious. Before thinking about the infrastructure, we should pay more attention to social assistance in order to help protect people from the outbreak [of malaria]. The fifth objective is related to especially vulnerable groups in society. This objective aims to see who the vulnerable groups of people are and those people have suffered social shocks.

Government representatives' knowledge of the work of different ministries suggests that government coordination of the climate change response is producing some success. All government members indicate that they have a strong working relationship with other ministries and they say that they are working on a variety of initiatives. These include the Cambodia Climate Change Alliance⁴⁶; the approval of six Clean Development Mechanism (CDM) projects, putting Cambodia at the top of the list of least developed countries in terms of the number of CDM projects; projects integrating climate change education and emergency response information into primary and secondary education and university curricula; working on climate change debate forums, broadcast by the Ministry of Environment; working with the UNDP and UNICEF on a paper on climate change; and working on research projects to gather data to develop new seed varieties and improved agricultural techniques and inform climate change projections. One government representative explains why gathering meteorological data is so important:

Currently when people talk about climate change, they are referring to negative impacts which have resulted from natural disasters. People think that these are

⁴⁶ For more information on the Cambodia Climate Change Alliance:
http://www.un.org.kh/undp/~docs/projects/docs/Prodoc_00073625_CCCA.pdf

climate change. The impacts have increased over the last several years [but] we have to find the causes. At an early stage, we can't count them as climate change.

Although most of their expertise is concentrated at the national and international political level, all government representatives focus on the potential impact of climate change on people's livelihoods. Their comments suggested that inter-ministerial communication has helped government representatives draw links between current events and the challenges posed by climate change:

I have seen reports from three ministries. First, there is the report from the Ministry of Agriculture, Forestry and Fisheries, which reported that the rain has been delayed, so the cultivation period is delayed too. As far as I know, few people have been able to farm at this time. If we consider [the situation] now, the potential for farming is lower than last year.

Two principal barriers to implementing a national climate change response emerge from the comments of government representatives. One is a lack of financial support:

I can tell you what I've heard; that 200 million dollars have been requested for just one National Adaptation Plan of Action (NAPA) programme, while we [currently] have only ten million dollars for nineteen programmes.

The other is a lack of information on climate change across Cambodian society. One parliamentarian with a prominent role in the national response to climate change emphasises that 'education and dissemination of information on climate change to the public' is one of the priorities of the National Strategic Development Plan (NSDP).

One government representative points out that there is a lack of understanding of the issue outside national government:

It is not only at the commune level that this is not understood; even the mid-level doesn't [understand].

Some efforts have clearly been made to encourage implementation of climate change at the local level:

[Our organisation] has tried not to implement climate change projects directly, but has let the ministries do this, by encouraging implementation at the level of provincial and commune councils.

However, the comments of officials working at the commune and village levels indicate that much needs to be done to translate the planning at the level of national government to implementation of programmes on the ground, as indicated by a typical comment from one commune council leader:

I do not know which public institutes in the province understand climate change or are responsible for climate change.

Provincial governors

The extent to which provincial governors have a technical understanding of global climate change is difficult to assess, given the mixed understanding among the small number interviewed for the research. While some have a more detailed understanding of the causes of climate change, and recognise that it is a global phenomenon with global causes, others appear to hold some misconceptions about climate change. They all agree, however, that the climate is changing and many of them give personal accounts of the changes they have observed themselves:

I have lived here since 1979 until now. Before, the water was far away from the trees, but now the water covers the beach and there is almost no beach for playing on. If we plant more trees we will expand our beach. The problem is that the water level is rising. Most of the rice fields near the sea had never been damaged by the floods before, but now I heard that they have been flooded and that water is accumulating at Prey Nop. Last year, the water that accumulated at Prey Nop destroyed a lot of people's paddy. The rise in sea levels causes salt water to flow into the fields and affects the crops of people who live in that district. So it damages the rice because rice can't grow in salty water. It still fails even when the normal water comes back, because being flooded by salt water for such a long time. [People] get nothing, if the rice crop is damaged. I already said that the rise in sea water can cause bad results for the people who live near the beach area that do farming with rice and so on. In past centuries, around one thousand hectares were destroyed. I have been [here] since 1979. I have never seen seawater flow into the river water like this, so I regard the rise in sea levels as an impact of climate change, and also [a way of explaining] the meaning.

As I was saying about the Mekong River, in the past, the river level increased and decreased normally, but now the river level increases and decreases unpredictably. For example, last year the river increased by 23 metres, but the river has never been like this normally in the past. In general, it rises by 20 metres; then it falls. So the water was not sufficient for people to irrigate their farms this year, during both seasons. The river level has been really low. Until today, the river level was at its lowest point. 20 years ago, at this point in the year, if people's farms were on the riverbank, people were quick to harvest their maize in case the rise in the level of the river flooded the fields. This was in 1979. In June 1979, the water rose right up to the bank, and in 1978 in Kratie people rode double-decker boats down the road because the water came up so high. Now the water does not flood the province. In the past, we were afraid of the rainy season. When the season approached, we – that is to say local and provincial authorities or committees – had to prepare in case of flooding. Nevertheless, the rain now is like it was before, but we know that the river does not come up as high as before. However, we can't assume that there won't be any disasters in terms of flood because some countries never had floods before, but when there was a flood, cars and houses were flooded. The weather is irregular.

These accounts are illustrative of the way in which provincial governors approach the subject of climate change. Rather than focus on the causes of climate change, as those with technical expertise tend to do, they discuss the impacts of climate change and support this with reference to personal observation. They say that rains are irregular now, that temperatures are higher and that there are more frequent storms:

We did not have storms. Or we did, but they were very rare. Floods, too, were very rare. During my life, I only saw them once in the past. But now they take place very often. We had one in 2000 and then ... we have had one almost every year in Kompong Speu. You might know about this the floods in Kompong Speu. People are very poor. But after the flood the water has gone. People do not have water to do agriculture. It is very difficult for people. The impacts from floods and droughts are the same.

Some say flooding occurs more frequently and in coastal areas they are concerned by a rise in sea level and subsequent saltwater intrusion. Several mention low water levels in the Mekong River, and low levels of water at dams, meaning that there is less water for farm irrigation. They link these changes to impacts on health, citing recent incidences of diarrhoeal disease and other diseases requiring hospital treatment, and deaths caused by lightning during thunder storms, which they say are more frequent:

Normally, we have more than enough water in July. We were scared of floods in July. But now, based on what we have seen by the road, we can tell that very few farms have transplanted their rice. And some of them have transplanted onto dry soil. We do not have enough water. So we can see the impact. People cannot do agriculture. And we get diseases from climate change. It makes us sick. Those impacts have brought people to poverty.

They all express concern that the lack of predictability in weather patterns, combined with a lack of preparation among rural communities, makes people very vulnerable:

In Cambodia, if people get a large yield from their farm, they will sell it. They will keep only enough to feed them for a day. If there was no rain and they could not farm, what would they do for the next year? What would they eat? This is a problem for them. They say it is not only humans that get sick but also animals such as cows, pigs, and chickens. I have no idea about that, [but] chickens die when the weather is very hot.

Rural areas are more heavily affected because rural areas are responsible for agricultural production. If there is no rain, the farms fail. There is no hope. Farmers [here] pin their hopes on rain because [we] have no main canal or smaller channels like in Pursat. [Here we are] located on higher land, so when it rains, the water flows to the lower land.

The majority of people's livelihoods count on agriculture, so they face difficulties because they have very few job alternatives, given the ban on exploitation of forest and its by-products.

Provincial governors make the most diverse range of connections between climate change and other aspects of society of any key informants in the sample. Not only do they connect the impacts to agriculture and health, as do all key informants. They also see the implications of climate change for the transport sector, both because of the carbon emissions generated by this sector, and because of the consequences of flooding for transportation in the country. They connect climate change to increased incidences and severity of droughts, and identify these as a trigger for migration.

Provincial governors also explore the possibility that climate change could affect women disproportionately. They perceive that women could be more vulnerable to water shortages because of their domestic responsibilities, including fetching water. One says that 'gender equity is still an issue in the community'. Another makes the observation that it is 'mostly housewives' who come forward to request assistance from the authorities in the case of floods, storms or problems with farming. He adds, though, that 'some women don't dare to speak' to figures of authority and 'ask men to replace them' in discussions of this type.

Beyond their own observations, the most common sources of information on climate change for provincial governors appears to be the national and international media, radio in particular. All governors, though, mention other organisations working on the issue. They mention government ministries, including the Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Water Resources and Meteorology and the Ministry of Women's Affairs. A few refer to a speech given by Prime Minister Hun Sen in 2009. NGOs are also mentioned as a source, with WWF, WorldVision and the Cambodian Red Cross mentioned by name – the latter in the context of disaster response. Some say they have learned about climate change through workshops, websites, and a few through newspapers. One mentions the Women's Association for Peace and Development, explaining that their work is particularly focused on 'preventing smoke'.

The variety of sources on climate change identified by provincial governors suggests that government efforts to engage the provincial level in the climate change response are achieving some success.

Provincial governors in some areas make explicit reference to the national response to climate change. When asked what he knows about government activities on climate change, one provincial governor replies:

The provincial level has to implement government policies because provincial levels are part of government. We have been implementing [programmes related to climate change] since the third mandate.

Others say that they are not implementing national programmes within their province. All however, mention at least one government initiative, including work to reduce carbon dioxide emissions; investment in hydropower; education programmes to discourage people from using chemical fertilisers and burning their surplus; tree-planting

programmes; and government policy on raising awareness of the impacts of climate change among the public.

At the level of their provinces, some say they are working on programmes to reduce firewood and coal consumption; raise awareness of climate change and 'change people's perceptions'; select and introduce new seed varieties and increase rice productivity; and work on replanting trees and mangroves.

When asked what the barriers are to implementing programmes, provincial governors identify several obstacles. The principal obstacle, mentioned by many key informants, is that poverty prevents most people thinking about anything beyond their immediate, everyday needs. A barrier specific to coordinating work on climate change at the province and commune level is identified by one provincial governor, who explains that they have attempted to gather representatives from different villages within communes. Such an attempt at coordination has been frustrated, however, by the cost of transportation, with individuals finding it hard to travel from their villages for the meeting.

Unsurprisingly, in light of these comments, provincial governors say that there is a need for more funding for climate change projects. They also say they need financial support, and better provision of resources. Several explain that their communities need seed adapted to higher temperatures, disease, and drought. Others say they need pumps and gasoline to irrigate their fields. Along with these resources and financial support, there is much emphasis on the need for information provision, including through media.

Specifically, provincial governors suggest that there is a need for 'role models' to communicate on climate change; that there should be educational spots on climate change; that radio should be used to broadcast information on climate change; and that the UN should do more to communicate what is being done globally to respond to climate change. One explains why he thinks the Ministry of Agriculture should be involved in communicating to people on climate change:

The Ministry of Agriculture plays a very important role. When people can't get yields from their agriculture, the Ministry can show them about the impacts of the climate change. They will accept it when people explain the reasons that they cannot get yields. Most people do not care much about anything that does not affect them [directly].

Commune council leaders

Although commune council leaders associate the term 'climate change' with global phenomena, such as drought and extreme temperatures in other parts of the world, their explanations of climate change tend to focus on localised deforestation and weather changes within Cambodia.

All commune council representatives have heard the term 'climate change'. They tend to explain the term in reference to changes in the weather, such as increases in temperature and changes in rain patterns. These changes in the weather are often

described as having happened in the recent past. Members of the commune council mention TV, radio and word-of-mouth – particularly the older generation – as sources from which they have heard the term ‘climate change’:

I heard [about climate change] from the old generation. They always said that it did not happen in the past.

Several commune council representatives say they have heard about ‘climate change’ from international news:

I watched the international news and saw that many people died because the weather [in Africa] was too hot.

Almost all members of commune councils think of ‘climate change’ as a global problem, perhaps as a result of exposure to such news outputs. Fewer of them say they recognise the term ‘global warming’. Very few recognise the term ‘greenhouse effect’ and none know how to explain it:

Key Informant: *Glass house is it similar to guest house?*
Interviewer: *No, it is the greenhouse effect. [Pause] Have you ever heard of it?*
KI: *No. I do not understand about glass houses and gas...*

Most say that the weather is changing. Commune council leaders attribute this to a combination of natural causes and human activities. It is impossible to separate their accounts of the ways in which the weather has changed from environmental degradation more broadly:

If people had not done anything, the climate would not change. When they have done things such as producing tyres, it has produced very strong smells and huge impacts. It has spread out a lot of smoke. But the owners have not understood how much their work has impacted on the environment. It has impacted on human health and climate change. If they had done the same as me, the climate would not change... [But] they are using technology, creativity, new initiatives...

When asked what causes the weather to change, all mention deforestation. Most make reference to tree-cutting by people within their communes, but some say deforestation can be attributed to illegal logging on a larger scale. Many connect weather change to the use of chemical fertilisers and pesticides, which they also link to diseases among the population, and to the emergence of pests on crops. Other associations are made, though less frequently, between weather changes and waste disposal and water pollution. A few allude to the perceived impacts of mobile transmitters in their explanations of what causes the weather to change:

I heard people say that many phone transmitters would wear out the leaves on the palm trees. I found it was true when I checked.

Many make a *direct* link between the production of smoke – through motor vehicle use, machinery and factory production – and an increase in temperature:

The temperature on the earth is increasing because motors and cars have produced a lot of smoke.

Most link the term ‘climate change’ to the degradation of the natural environment through development. One says that ‘nature will be changed by development’.

Some also connect an increase in temperature to the depletion of the ozone layer:

When the ozone layer is thin, the sunlight shines on the earth very strongly...When sunlight shines very strongly, the heat makes people sick... We have created factories and energy industries. All the gas industries could destroy the ozone layer. When the smoke spreads out and goes up into space, it will destroy the ozone layer.

All connect the term ‘climate change’ to the observed impacts of changes in the weather, namely, negative impacts on human health, water resources, agricultural yields, and livestock. In some communes, the drought in the past year is said to be especially bad. For one commune council leader, local strategies for coping with drought are not working as they usually do. Note the level of localisation in his description:

Normally, even if it doesn't rain, the water fills the dam, so people can channel the water to irrigate their crops, but this year, as I told you, the water is almost gone. It has dropped right to the bottom, and there is not enough water to channel to the fields. So everything is dammed up and people have not prepared their farms here. Over there, though, the rice crops are growing well, because people have water.



Source: BBC WST 2010

Most commune council leaders say they have heard about government programmes on tree-planting, and many are actively involved in tree-planting activities within their commune. Some mention other programmes, including irrigation and farm diversification. However, none have heard of any government programmes on climate change at any level. Most have implemented tree-planting initiatives and some know of pollution reduction programmes, although these are generally described in vague terms, such as a reference to a project 'to move factories out of the city'.

Yet most look to the government as a source of information on the subject. When asked where they would go for information, many suggest they would listen to radio and watch TV – especially news programmes – for more information on the subject. Of those who mention government departments, most say they would address the Ministry of Water Resources and Meteorology, the Ministry of Agriculture, Forestry and Fisheries and/or the Ministry of Environment. A few mention the Ministry of Rural Development and some have experienced working with the Cambodia Red Cross.

Commune council leaders say they need money and tools. Yet for many, the most important resource for them in their role as commune council leaders is information:

I do not know what resources I need because I do not understand about [climate change]. But I think the best [resource] is knowledge.

One commune council leader provides a useful insight into how people in his position seek information on the subject of climate change:

Interviewer: *If you want to find information about climate change, which institutes or individuals do you think can give you this information?*

Key Informant: *I think that I could only do this in accordance with my network. For example, if we want an organization to disseminate information about climate change, legally we must make a request to the district level, and then the district makes a request to the provincial level and the province contacts [the relevant] organization. It progresses like that. We cannot skip these steps. We cannot [make a direct request]. It is related to the law.*

I: *Do you know which individuals or institutions might be trusted by the public if they were to talk about climate change?*

KI: *In my commune and in the entire province, I think only the top leaders would be trusted when they talk about climate change. They are the provincial governor, deputy governor, district governor and district deputy governor. They can disseminate information so the public can understand. Our commune councils also participate alongside them. As I understand it, when there is such a message, it must come to commune level and then the commune can pass it on. But if we want to disseminate information, it has to be the provincial leaders who disseminate first.*

Many of the comments of commune council leaders suggest that the response to extreme weather events is currently reactive:

We have not yet faced any serious problems from climate change. Once we encounter a problem, we will be able to get a response.

However the issue of information dissemination is approached, one message that needs to be communicated is that responses to climate change need to be planned in advance.

Village chiefs and elders

Many say they recognise the terms 'climate change' and 'global warming'. The primary source of these terms for village chiefs and elders is word-of-mouth, although many also say that they have heard the terms 'climate change' and 'global warming' through TV and radio. This group is concerned about the impacts of weather changes on their communities, and say that they do not know how to respond.

For village chiefs and elders, the primary source of information on the changing weather is word-of-mouth. Most say that the changes in weather they have experienced are a common subject of conversation within their communities. Many also say they have heard the terms 'climate change' and 'global warming' through the TV and radio, although several say their access to media is limited.

Many village chiefs say that they have heard villagers, particularly village elders, discussing the changes in weather.

I've heard about it during ceremonies and wedding parties. The old people formed a group to discuss it. Then, some old people, and some who are about my age, from this village, were talking about climate change. And the cause is partly greenhouse gases, but the main cause is the loss of forest, and smoke from machines which makes it doubly hot. I am not sure [what 'greenhouse gas' means]. In rural areas like ours, we don't understand much about science.

It appears that their sources are not always well-informed on the subject, however:

I heard [the term 'global warming'] from the older people. They say that the globe will be hot one day. It is known as 'fire day'. On 'fire day', the globe will be set on fire.

Understanding of the phenomenon is very mixed among this group. All connect changes in weather to deforestation within Cambodia. However, their comments suggest that this is because they connect localized loss of forest to localized changes in the environment, and consequently, to changes in the weather:

The environment has been changed by humans. In 1979, we had thick forest. But now there is no forest or flooded forest. As a result, there is no shade on the land, and that is why the land becomes dry.

More village chiefs connect deforestation to local activity by individuals, rather than large-scale logging. They explain that people cut trees out of necessity:

Destructive activities took place because people faced financial difficulties. They did not know how to earn a living besides selling firewood and cutting down the trees. Why? Because villagers did not know of the problems that would come later. They thought only about their livelihoods.

Many say they recognise the terms 'climate change' and 'global warming'. In addition to linking it to deforestation, they connect 'climate change' to gas emissions and smoke from industry and motor vehicles:

One thing is factories, emitting gases. On the other hand, forests are being lost through logging and areas being exposed to the open air. From my point of view, very high temperatures are caused by the loss of forest and gas emissions from factories.

Others explain the changes in weather differently:

It gets too hot when the temperature of the earth increases. I think it will cause the earth to become thinner and thinner and then explode. I am not so clear about it.

They said that the earth and sun were very close together, almost touching one another. So scientists had to separate them or the earth would be set on fire. I am not sure about it. I just heard it from the radio. I never went to any class.

One village chief describes the frustration felt within his community at not having sufficient information on the reasons for the changing weather:

I don't know where to go for this kind of information. I would like to learn more about it, though. I don't know where I can learn more about climate change, and the cause of the [warming of the earth]. My villagers want to know, as well. As I told you before, the change in temperature from cold to hot is the root of the problems in our country. It affects animals, it affects crops. So people worry and are keen to know the reason for the increasingly high temperature, which is so different from before. If they found out that you were the one who made it hot like this, you wouldn't be able to hang around here much longer!

Besides the impacts on agricultural livelihoods and food production, village chiefs and elders say that the changing weather affects their communities' health:

Climate change weakens our health through disease and low standards of living. Why do I say this? With climate change, the two seasons approach unexpectedly and irregularly, so we cannot cultivate in the right period in accordance with the plants' needs. Harvest time approaches, but there is no rain. Also, the period for

cultivation ends up flooded When we lack water, water shortages, we use water we have collected. If we fail to maintain water quality successfully, then we drink or use water containing viruses, and we get diarrhoea.

Concerns for food security are frequently expressed:

At the present time, my villagers are facing food shortages and their living standards are low. This month, some families have run out of food.

Many say that drought has an impact on children's education:

Because of the heat and drought, parents push their children to help them pump water into the fields by using pumping machines. It is what I observed during the harvest The children in my village go to school irregularly because farm work depends on water.

Yet despite their concern, many village chiefs and elders say they and their communities do not know what to do to respond to the challenges posed by the weather:

[People] just shout about the weather being hot, but they don't know how to reduce the heat. They do not know how to prevent it. They just use scarves or umbrellas to protect themselves from the heat.

The responses that are mentioned tend to concern water management:

This year, people who didn't have wells attempted to dig two or three . Families have used them and the water hasn't dried up. They also built dams and dug canals for water storage to cope with the drought.

When asked which resources could help them respond, most mention fertiliser, information on how to improve their agricultural techniques, dams, water channels, and improved water sources, better roads, and information on climate change.

Most village chiefs and elders look to the government to give them information on the subject of climate change:

I am thinking about the hot weather, but I don't know what I can do So I want the government to provide more detail on the issue so that it is easy for me to explain to people.

I want the present government to explain to people why it's unusually hot so that people know why; for example, it's hot due to greenhouse gases, deforestation, and so on. I want a clear explanation.

There is clearly a need for information on climate change at the village level, where leaders currently know nothing about the government response to climate change:

I think the government is finding solutions, but I don't know what they are doing.

Many village chiefs and elders suggest that the government should work with the media to disseminate information about climate change to the public:

I believe that the government should organise dissemination so that we get more information. If they cannot come to the villages they should produce TV spots and radio spots to broadcast to all members of the public.

Celebrities

Understanding of climate change is very mixed among this group. Celebrities' explanations of climate change centre on the *impacts* of climate change rather than the causes. The detail of celebrities' explanations indicates some important misapprehensions. All celebrities know that climate change is a problem with global consequences. However, knowledge of the political dimensions of the problem is patchy. Unique to this group is the belief that communication on climate change should employ 'scare tactics' to persuade people of the importance of the issue.

The celebrities interviewed for the research all know the term 'climate change'. They explain the term with reference to changes in rainfall and increases in temperature, and the impacts of these on farming and health within Cambodia. They also connect the term to extreme weather events both in and outside the country:

It is related to changes in weather patterns, hot temperatures and natural disasters such as tsunamis... In the past, we also had natural disasters but they were not as serious as now. Some countries used not to have earthquakes, but now earthquakes have occurred in their countries

All have heard the term 'global warming', although they are less sure of the meaning and its implications for Cambodia. One explains that he is sceptical about the phenomenon:

I am not sure whether [global warming] is a rumour or what. [They say] the earth's temperature will increase and it could affect the future. I don't know the reason. When I went to the USA, I saw the news on TV about the ice melting so quickly that it is a concern for the world. We don't completely believe it, though. If it melts very fast, then the world will be affected by flooding; the USA and other developed countries will face this disaster. But I am not saying it's true.

None understand the term 'greenhouse effect'.

Celebrities' explanations of climate change centre on the *impacts* of climate change rather than the causes. When prompted on the causes, they all connect climate change to development. Almost all say that most responsibility lies with developed countries, due to greater industrialisation and larger populations.

The detail of celebrities' explanations indicates some important misapprehensions. Climate change is frequently conflated with environmental degradation more generally,

with reference to harmful practices such as fish-shocking⁴⁷ and household fires. The changes in the weather are sometimes attributed to the thinning or disappearance of a 'layer', a reference to ozone depletion, although ozone is not mentioned by name:

The sun shines directly on to the earth now. We do not have anything to protect [us] from the sunlight. People have done something to destroy that layer. The layer is almost gone.

Some think that the production of smoke produces changes in the weather:

It is because there are many factories, machines, cars producing smoke According to what I have observed, [global warming] is caused by many machineries that produce smoke. When [the smoke] reaches the clouds, it comes back down.

Smoke appears to be understood to cause localised changes in the weather:

In terms of climate change, [the situation in] Cambodia is not yet as serious as other countries because [other countries] have many factories and produce a lot of smoke.

More than one celebrity suggests that changes in weather may be the result of the earth and sun moving closer together.

All celebrities know that climate change is a problem with global consequences. However, knowledge of the political dimensions of the problem is patchy. A few celebrities know there was an 'international meeting' to discuss climate change, but this meeting is not named. There is little awareness of the political issues at stake. One knows that international discussions concerned 'emissions levels'; another thinks it concerned the production of 'chemicals and arsenals', which she thinks have been found to cause climate change.

All say that they heard the term 'climate change' through the media, especially television. Most say they have watched international television, at home and abroad, and international channels are mentioned most frequently as a source of information about climate change.

Celebrities are interested in the role that media can play in raising awareness about climate change. They all make suggestions for the ways in which media can communicate with people on the subject. All say that communication on climate change should 'frighten' people in order to have an impact:

I suggest we find a more serious term [than climate change] that will make people feel scared.

⁴⁷ Stunning fish using electric shocks in order to catch them.

We can use TV, we can use entertainment programmes. It will be good for people to know about [climate change]. They will be scared when they find out about it. They will not want the consequences to affect the next generation. We can show them pictures. We will scare them, even though we do not want to use negative things to educate people. But if we do not use this approach, then we cannot get our message across to them.

These comments illustrate another point that is frequently made by celebrities: the need to emphasise the effects of environmental damage on future generations:

From generation to generation, the environment is lost.

One celebrity refers to the role that the Buddhist idea of *karma* could play in encouraging people to care for the environment:

I believe people would take action immediately if you showed them that the impacts would affect their lives. It is like the Buddhist principle. If Buddha told me, 'Do not hit other people because they might get hurt', do you think I would stop hitting you? Or change my mind? No. But Buddha uses the theory of karma: 'If you hurt other people, you or your next generation will be hurt'. So people are concerned that they will be hurt themselves. All people are selfish. They would not do it if they knew the consequences of their actions.

The same celebrity outlines the limitations of previous media communication on the environment. His comments reflect the emphasis placed on deforestation by both key informants and the public:

I have not seen any organisation providing detailed information to people through media. They are only scratching the surface by saying, 'Let's care for the environment together'. They keep saying this. But how can people care for the environment? They do not understand. People think that they only need to plant trees to care for the environment. Sometimes, they only understand that point. They do not care about other issues about smoke from their motor bikes, and so on.

Industry representatives

Industry representatives are among the most well-informed on the issue, with several referring to the greenhouse effect and to carbon emissions spontaneously. Most say they have heard the terms from the media, specifically news programmes on both Cambodian and international channels. While others tend to explain the concept of climate change in relation to its *impacts* on the country, industry representatives tend to connect the topic to the question of the *causes* of the problem, particularly energy consumption, and they know that global climate change poses a challenge to industry.

Industry representatives are among the most well-informed on the issue. All industry representatives are familiar with the terms 'climate change' and 'global warming'. Several mention the terms 'greenhouse effect' or 'greenhouse gas' spontaneously:

[Climate change] means global warming. In English it is called global warming. It is mainly caused by the greenhouse effect...It is caused by carbon dioxide that is created by motor vehicles and industries in short from human activities.

Most say they have heard the terms from the media, specifically news programmes on both Cambodian and international channels. They all make a connection between these terms and energy use, and variously to industrial, scientific and economic development. There is considerable variation in their abilities to explain these terms, however. Some industry leaders have a good technical understanding of the causes of climate change, referring to carbon dioxide emissions and greenhouse gases. Others describe the phenomenon in relation to more generalised pollution, using less specific terms, such as 'poisonous gases'. A few relate climate change to ozone depletion, but this is less prominent than among other groups interviewed for the research.

While many other key informants explain the concept of climate change in relation to its *impacts* on the country, industry representatives tend to connect the topic to the question of the *causes* of the problem, specifically energy consumption:

We need to use more power, so we have a worse effect on the environment. The reason for this is that the more electricity we use, the more fuel we use, and it releases poisonous gases into the atmosphere. I have also noticed that the whole world is paying more attention to renewable energy nowadays.

All industry representatives know that the global industrial sector is implicated in climate change. As such, most say that Cambodian industry should be considering related questions:

The Ministry of Industry should think about climate change as well, because big industries have caused it.

They are thinking of ways of using less energy and using it differently:

I learned [about the greenhouse effect] and put it into practice in my company [We] have implemented a project called 'clean production'. Its objective is to reduce the greenhouse effect by using resources effectively and so on. We have worked to reduce smoke and waste because they have affected the environment. Smoke from generators and other sources is causing the greenhouse effect.

Given that Cambodian industry is already interested in the question of energy use, it appears there is potential to engage the sector in mitigation activities:

I have used solar since 1999 It is running now. And ...our biogas is produced from animal dung. [Both are] 50KW systems. Together, I have 112 KVA.

They know that climate change poses an international challenge to industry:

As I understand from the news, even the USA has a complex problem related to climate change and industry. They can't reduce it yet but they have a plan that we call carbon credits. All those developed countries [will use] these funds to address the effects [of climate change].

The impacts, as well as the causes, are understood in an international context. Most feel that Cambodia is not as badly affected by climate change as other countries are:

I never heard news of Cambodian people dying because of global warming, so maybe it doesn't affect anything [here]. It's not like in India, where a lot of people died recently because of the impact of climate change.

Within Cambodia, industry representatives emphasise the potential economic impact at both the family and the national level. They connect climate change to a lack of water, with consequences for agricultural yield and people's ability to work. Their concerns about reduced agricultural productivity are expressed in the context of their own business interests, as well as being linked to their worries for food security and for the livelihoods of poor Cambodians.

Media representatives

Media representatives appear interested in the topic of climate change. Currently, however, it seems that climate change receives relatively little attention from the Cambodian media and is largely treated as an environmental issue. Yet all suggest that media could play a role in communicating on climate change. Media representatives point to the need to approach climate change stories from new angles, to give journalists training on the subject, and to provide guidance on how to approach the topic.

Many key informants recognise that the media has a role to play in providing information and drawing people's attention to the challenges posed by climate change. For their part, media representatives appear interested in the topic and concerned by what they have heard about climate change. They offer a number of suggestions for improving media coverage. Currently, however, it seems that climate change receives relatively little attention from the Cambodian media and is largely treated as an environment story.

While key informants from the media and non-media sectors have ideas for the ways in which media could support a response to climate change, their potential for doing this is currently limited by several factors.

First, climate change appears to be considered solely an environmental issue. The comments of one media representative in relation to coverage of climate change are typical:

We often write about the rubbish dumps in Steung Meanchey .that's related to climate change and the environment.

Whether or not one agrees with this classification, it entails another important challenge: environmental stories 'don't sell':

[Let's say] we have five or six stories. The editors start to classify them. Which news do most people want to know? ...Environment is one of the topics and it is at the bottom of the list. When they do not have space for it, it will be dropped So there needs to be a policy [on climate change]. Or the government has to spend money for the media to educate people about it.

Media representative

Some media representatives point out that there is a need to train journalists on climate change, a need that is reflected in the varied levels of knowledge of the subject among media representatives interviewed for the research. It also seems that journalists might be missing opportunities to draw links between the topics they cover and climate change. One commune council chief seems to have *inferred* a message about climate change from a radio programme, rather than it being an explicit message:

One day, I heard on the radio that they are reducing car use in France now. They are encouraging people to use bicycles. They do not want people to use cars or motorbikes because the smoke will pollute the air. Therefore, people [must be] causing climate change by doing these activities.

One explains that there is a need for editorial guidelines for journalists:

News reporters need to have technical skills. News reporters have guidelines on the HIV issue, for example. It is forbidden to use the term 'HIV victim'. They do not allow us to use this term and that term It is similar to the climate change issue, I think. We need to have guidelines for covering climate change.

Media representative

Despite apparent limitations to covering climate change in the current media landscape, all of the media representatives interviewed have suggestions for ways in which the media could support the response to climate change.

Some point to the possibility of media providing life-saving information about extreme weather events:

I think that climate change could severely affect people in remote areas Here we have the internet so we can check the weather forecast. We know that tomorrow or the day after tomorrow a storm will arrive. It has been blowing from the Philippine gulf. We know ahead of time that it will blow through Laos and Thailand we are aware and can prepare. But they cannot access the news. They could die if they cannot access the news.

Media representative

The comments of one politician suggest that there could be a role for media to play in supporting politicians and those with technical expertise on climate change to communicate in a way that people can understand:

Sometimes technical experts speak about the deep meaning of things, so they do not make things clear to people. That is why we need people who are experts in speaking. [We need the involvement of] politicians as well but technical experts are clearer than politicians, so they have to help each other.

Government representative

Most media representatives agree that lack of access to media is a barrier to some communities – including women and rural people – receiving information, and so they suggest alternative communication approaches:

The important thing I want you to use is mobile education We do not use it currently [But] housewives are always at home. They do not have time to read. But [mobile education] could attract them. They will want to know what we are talking about in front of their houses.

Media representative

Although there is evidence to suggest that climate change is largely considered an environmental issue, one of the media representatives suggests a change of focus:

We can incorporate [climate change] to society or economic pieces and science pieces or pieces about international news

Media representative

Others suggest that climate change be addressed through ‘drama or fiction’, and another through comedy. One refers to the way that writer Gnait Sophorn has written about deforestation to indicate the potential for addressing the topic of climate change in fiction. A few say that the best messengers on climate change would be ‘artists’. Several say they are interested in using ‘old people’ as sources of information or stories on climate change.

NGO representatives

NGO representatives are well-informed on climate change. They appear familiar with the terminology, and unlike many key informants, they give confident explanations of the causes and effects. They are concerned about the ways in which the impacts of climate change on agriculture, water resources and livelihoods will affect the most vulnerable populations. They feel that these people lack the information and resources they need to respond. They emphasise the need to involve leaders at the village and the commune level in communicating to the public about climate change.

Most NGO representatives highlight the vulnerability of Cambodia’s rural population to climate change. They recognise that any threat to agriculture will threaten the food supplies and livelihoods of rural people:

Drought destroys farmers' productivity. Here we are talking only about the impact on agriculture. (...) It will be even more serious, if we look at the impact on their lives.

Some are concerned that water is not managed sufficiently well in the country, and express concern about the implications of water insecurity:

In the future, we might have conflicts over water...But it would not be a problem if there were [better] water resources. In Cambodia, we have a big river. In the rainy season, there is water everywhere. But we lack the capacity to control our water resources. In Vietnam and Thailand, they have many water systems. Their water system looks like blood vessels.

They say that the impacts of climate change can alter rural ways of life:

[If] due to the effects of climate change, there is a severe drought in some villages or districts, people are forced to work in factories to earn a salary in order to support their family in the rural areas.

They call for the government and donor organisations to offer support to the most vulnerable populations:

Rural people are badly affected the government and donors have to support rural people first.

They perceive that most people in Cambodia do not understand the causes of the problem, and lack the information and resources they need to cope with changes in climate, due to a lack of both education and access to media. They explain that climate change is particularly challenging for people living in poverty:

I think that rural people might not know about these issues because they are unable to get the news. In addition, they do not prioritize these issues They only care about finding food to eat poor farmers or uneducated farmers do not have the capacity to adapt to climate change.

Deforestation is seen by NGO representatives as Cambodia's principal contribution to climate change, together with pollution from energy consumption:

[We should not] destroy the forest. It is a very big issue. Forest is very important for Cambodia Another thing is energy consumption Even though we have not significantly contributed [to climate change], we still contribute when we burn things; especially the electronics factories. They are not normal because they consume a lot of fuel. And when they stop using those factories, the waste and plastic will be burned.

The question of gender inequality is more prominent in the NGO interviews than any other group of key informants. Although most NGO representatives think that climate change could affect everyone, they say that women will be more vulnerable to its effects due to their responsibilities in relation to farming, domestic tasks and caring for children:

When climate change [comes], women are more at risk than men. They are responsible for finding firewood, fish and meat, and farming near their houses. Those resources will become rare.

If they do not have resources and capacity to adapt, then women will get strong impacts. For example, when they experience drought, women have to farm with their family. If they do not get a good yield, they skip meals to sacrifice to their children and husband.

Most see a clear connection between climate change and development. NGO representatives do not want Cambodia to exacerbate the problem of carbon emissions, but recognise that the country needs to develop:

[We must] not allow developing countries to repeat the history of developed countries and emit more carbon gas.

Most NGO representatives know something of the national action plan of adaptation (NAPA) prepared by the Cambodian government, but they say that government activities have not yet reached the local level:

There are many institutions working on [climate change]. But those activities are happening only at mid- and national level. There is no activity at the regional, provincial, and local levels.

They explain that any activity at the local level needs to begin with information provision for local leaders:

It is impossible to get ordinary people to understand without getting local authorities to understand first. We have to make local authorities understand, and then they can communicate to people in the villages.

Religious leaders

Religious leaders understand the changes in the weather much as village chiefs and elders do, with similar variation in the way they understand the topic, and similar misconceptions. Most refer to their own observations to explain the terms 'climate change' and 'global warming', although religious teachings have also influenced their perceptions of the issue. Yet many religious leaders express enthusiasm when asked about the role that religion could play in communicating to the public on climate change.

Among religious leaders, as among village chiefs and elders, understanding of climate change is mixed. Most refer to their own observations to explain the terms 'climate change' and 'global warming', although religious teachings have also influenced their perceptions of the issue. Most religious leaders say that there is a role for them to play in communicating on climate change, although their comments indicate they need more information if they are to do this successfully.

Although religious leaders perceive that human activities have caused the weather to change, most - Buddhist monks and Muslim leaders alike - appear to share a notion of divine, or natural, retribution. One Buddhist leader explains that nature is punishing human beings for their wrong-doings:

It is a punishment from nature to living things on earth because human beings have done wrong. So from my understanding, nature has punished human beings, animals and plants on earth.

Similarly, a Muslim leader says that the lack of rain and increase in temperature is God's punishment for human misdeeds:

[Humans] do not love each other or help each other. Or they love only themselves. They do not care about the animals and trees. They have violated the trust God put in humans. He has allowed us to live together with animals and plants. But humans have violated God's trust. Therefore, God's curse has come to human lives in the form of climate change and global warming.

Some Buddhists also see a generational aspect to the retribution exacted by nature:

Nature's punishment is a result of human beings not respecting the advice of their elders, and looking down on them...

Several Buddhist monks explain that Buddhist teachings foresee changes such as the ones Cambodians are currently observing. One refers to the Sermon of the Seven Suns:

There are stories in Buddhist teachings that the earth will be burnt one day, when there will be seven suns.

Buddhist teachings lend a spiritual character to the monks' approach to the question of deforestation. One Buddhist monk is typical in saying that '[Buddha] prohibits Buddhist monks and his followers from cutting trees'.

Another illustrates this idea:

The Buddhist faith places high value on the environment because from the beginning of his life until his death, Buddha preached under the trees and found a place to stay under the trees.

Besides the influence of their faith, religious leaders understand the changes in the weather much as village chiefs and elders do, with similar variation in the way they understand the topic, and similar misconceptions.

Yet many religious leaders express enthusiasm when asked about the role that religious belief and faith leaders could play in communicating to the public on climate change:

[Yes,] Buddhist monks! Monks could give sermons for climate mainstreaming if the Ministry of Cult and Religion allowed us to address climate awareness. We could tell people stories from Buddha's time as well as discuss issues in the present. We could do this if we were allowed to. I helped people to plant trees that can protect them from strong sunlight [and] they follow what I said. Some people plant trees at their house. Some have not cut trees in their rice fields.

Most religious leaders also see that schools and the media have a role to play in raising awareness about climate change:

They first way to train people is public school, due to the fact that most young people go to school. The second step is through radio and TV, because most people have access to radio, even if they are poor.

One makes the point, though, that information on the issue needs to give people a clear idea of what they can do to cope with the problems they face:

If you just teach and don't find any strategies to prevent the problem, they won't benefit from joining in. It is necessary for us to provide [people] with solutions to protect them.

Many religious leaders emphasise the needs of the most vulnerable people:

There are some families who are poor and don't receive information on natural disasters or climate change because they have no money to buy a radio.

I think most people who understand about the climate live in the city because they are educated and get this information from the media... But people living in rural areas haven't been educated about this problem and don't know about the programmes of relevant ministries.

With the needs of poor and rural communities in mind, several religious leaders stress that the government response to climate change needs to extend to communities at the commune and village level:

The government includes district governors and provincial governors, and not only the ministries. If we talk about government beneath the national level, it includes commune leaders and village chiefs. They play a role in leading the community. What I mean to say is that it requires participation from everybody involved.

Conclusions

Whether or not they fully understand the phenomenon, key informants are worried that the changing climate is affecting their communities, and that people do not have sufficient information to respond. From national government and media representatives, to village chiefs and commune council leaders, key informants say that they want to learn more about climate change and that they want to play a role in disseminating this information to the Cambodian public.

Although key informants use few emotive terms in their explanations of what climate change means to them, the overwhelming attitude is one of concern. With a few exceptions – some scepticism among celebrities and media representatives, for instance – key informants are clearly worried about the implications of climate change for the Cambodian population.

As well as being concerned, however, many key informants are confused by the issue of climate change. Key informants who are in many ways best placed to give information to their communities – village chiefs, religious leaders, commune council leaders – say that they are not sufficiently well-informed to communicate what is at stake.

All those charged with communicating on climate change will need support and information so that they can provide a consistent, reliable message on climate change to the Cambodian public.

Recommendations

Most Cambodians receive information from **TV, radio and word-of-mouth**. This is true of general information, and reflects where people hear climate change terminology used, and where they receive information about extreme weather events. Broadcast media are among the most highly trusted information sources. 91% of the population have access to a mobile phone; 40% of people do not own the phone to which they have access. More of the most vulnerable, including women and those living in poverty, say they rely on their village chief for information.

- Design communications on climate change around the information sources that most Cambodians use and trust: TV, radio and word-of-mouth. Enhance reach of word-of-mouth communication with mobile phones.
- Develop separate communication strategies for people who do not have access to broadcast media.
- Develop separate communication strategies for people who do not themselves own mobile phones.

Cambodians explain climate change with reference to its impacts rather than its causes. Most have an **experiential understanding** of the phenomenon, but do not understand the **scientific basis** for global climate change. Neither the **causes** of global climate change nor the **terminology** used to describe the phenomenon are well understood.

- Increase understanding of the scientific basis for global climate change.
 - Develop, pre-test and distribute an illustrated Khmer language journalists' handbook and guidelines for best practice in covering climate change.
 - Establish an information clearing house for Khmer language materials, many of which would be translations of existing policies, research, treaties and international standards.
 - Develop simple guidance on climate change science for inclusion in secondary and high school curricula.
- Improve public communication on science.
 - Deliver training to journalists on how to cover science.
 - Deliver media training to scientists on how to communicate science to the public.
 - Develop a pool of scientists who can be used by broadcast media to illustrate, describe and demonstrate science to the public.
 - Develop media and outreach formats that demonstrate the application of science to key areas of concern including agriculture, health, disaster mitigation, and water management.
 - Explore specific targeting of scientific information to target groups within the population, based on their different social and occupational roles, for example by age, gender, occupation and residence.

- Design radio phone-in shows for rural populations that bring together farmers and those with relevant expertise to share their experiences and develop solutions to widely expressed concerns.
 - Explore and develop children’s programming to increase the role of children as effective messengers to their friends and families.
 - Develop media and outreach formats aimed at children that will allow them to learn about science through making things, solving problems and applying basic science to challenges.
- Increase scientific knowledge about commonly experienced weather changes and events.
 - Give people relevant information for their own decision making.
 - Link agricultural science to climate science.
- Build people’s scientific knowledge upon their experiences.
 - Showcase ‘climate narratives’ to bring the experiences of older people and younger people together and to bridge the gap between traditional knowledge, common experience and scientific expertise.
- Focus on the highest profile perceptions and the more commonly experienced problems and events for greatest resonance.
 - Build upon the widespread understanding of the role trees play in weather systems.
 - Employ media and outreach formats to explain the role of trees and forests in Cambodia and around the world and use these formats as an entry point to introduce people to the concept of global weather systems and climate change.
 - Demonstrate the application of basic science knowledge to commonly expressed concerns related to agriculture, health, disaster mitigation, and water management.
 - Use the key areas of concern to ‘frame’ climate change coverage in news stories and other programme formats.

Cambodians agree that their weather is changing. Almost all Cambodians experienced at least one **extreme weather event** in the year preceding the survey. Yet more than a third received no information about the event that had affected them and three-quarters of those who did only received information during or after the event. People say they would use information to prepare themselves and to help others.

- Decrease the number of people receiving no information at all.
- Increase the number of people receiving information before the event.
- Establish a national broadcast alert system that is widely recognised by the public.
 - Combine TV and radio broadcasts of extreme weather alerts with word-of-mouth communications. Enhance the reach of word-of-mouth by making mobile phones central to a national alert system. Explore the possibilities of mobile phone distribution.

- Build capacity within radio and TV organisations so that scheduled broadcasts are interrupted in order for alert bulletins to be announced.
 - Develop a universal symbol that can be used in weather forecasts and as a mobile emoticon to communicate extreme weather warnings through text messaging.
 - Develop a storm/flood warning template on all mobile phones in Khmer.
 - Explore possibilities of mobile networks signing up to an industry-wide mobile alert scheme, with a universal extreme weather warning emoticon loaded on every phone and a network-wide alert mechanism that allows messages to be communicated during an emergency.
 - Identify ways of working with mobile networks to disseminate weather information and/or early warning information. Explore possibilities of isolating mobile users in specific areas of the country for early warning information dissemination.
- Plan a chain of communication between the meteorological services and partners including broadcasters. Ensure that it extends to province, commune and village levels. Test this system regularly and build in duplication and verification mechanisms. Establish alert criteria and train all people in them.
- Develop clear village-level strategies on disaster preparedness and response. Prioritize information to village chiefs in affected areas within the national chain of communication.
 - Ensure that every village chief in Cambodia owns a mobile phone, perhaps through targeted phone distribution.
 - Designate a 'weather person' in every village to support the role of the village chief within the national chain of communication. Train this individual to collect and send local weather information to central offices to support capacity development within the meteorological services, and in the case of extreme weather events, to send alerts to neighbouring villages.
 - Set up Early Warning System (EWS) and team to be managed at the community level to increase community access to national and local weather information and to support people to prepare and help others to prepare for disasters such as flood, drought and storms.
- Develop a national reach for weather forecasts.
 - Plan and deliver regular weather forecasts to fit daily listening and viewing habits and encourage the public to watch or to listen on a daily basis.
 - Conduct audience research on weather forecasts.
 - Investigate people's symbolic literacy and find out whether people can read maps. Explore whether symbols for common weather are widely understood.

- Ensure that primary and secondary school curricula provide children with the knowledge they need to read maps and interpret the types of information and symbols used in weather forecasts.

People are **uncertain** whether the changes they have experienced in their weather are **long-term**. 98% say that climate change is affecting their country now, but 22% do not know whether climate change will affect the country in the future. Key informants, particularly village chiefs, religious leaders and commune council leaders, are perplexed by the topic of climate change. Their comments suggest that the same is true of their communities. People's observations of and suggestions for responding to the changing weather are largely short-term; when they are asked about longer-term measures, many don't know what to do.

- Explore climate change, its effects and responses to it in a medium-term timeframe. Develop three, five, seven and ten-year milestones to track the emergence of effects and responses.
- Put the message that climate change is a long-term problem at the centre of a communications and media campaign.
- Explain that some predictions of climate change are uncertain, so long-term measures will need to be diverse and adaptable.
- Recognise that climate change science is a complex topic and make messages simple and consistent to avoid exacerbating confusion among local leaders and the general public.
- Explain that climate change is a long-term phenomenon and emphasise the need to find diverse, flexible responses. Centre climate change communication on practical solutions that correspond to the needs of Cambodian people.

The three most important barriers to responding to the changes in weather are **a lack of money, lack of tools and a lack of information**. More than half of respondents say they do not have the information they need to respond. Key informants from industry, NGOs and national government indicate that successful responses to climate change in Cambodia are being developed and implemented. Few members of the public have heard of these, however.

- Raise the profile of current successful efforts with the general public.
- Use information and communications to help people with financial priorities and planning for longer term responses to climate change.
- Use information and communications to help people to apply scientific knowledge and develop new technologies and innovations to respond to key areas of concern – agriculture, disasters, health, livelihoods, and water management.
 - Use media formats and outreach to communicate agricultural research to farmers.
 - Use media to showcase successful efforts in Cambodia and elsewhere in the world to respond to climate change. Develop media packages and

devote parts of news and other programmes to showcasing innovations and successful responses.

- Promote green technologies, inventions and responses developed by Cambodians for Cambodians.
- Use media and communication to explore community-based credit and saving schemes and micro-insurance and to inform people's financial decision-making.
 - Convene and broadcast community discussions in which communities decide how to spend money on community responses; in which they integrate climate change programming to local infrastructure programmes, especially water management; and in which women's voices are represented.
- Develop a pool of spokespeople from across Cambodian society who can be used by broadcast media to illustrate, describe and demonstrate successful initiatives that could be applied to climate change responses.
- Develop and deliver standard training and basic media skills for these spokespeople.

Cambodians look to **the government, the Prime Minister and NGOs** to provide leadership in responding to their changing weather. **Village chiefs, commune council leaders and religious leaders** are trusted sources of information and are well-placed to inform their communities about the issue, yet the comments of key informants suggest that they are not as well-informed about climate change as representatives from national government. Provincial governors could play a key role, as the provincial governors who participated in the research make the most diverse range of connections between climate change and other aspects of society of all key informants interviewed.

- Raise public awareness of the National Adaptation Plan of Action (NAPA).
 - Inform and train local leaders about the national adaptation plan.
 - Provide provincial governors with training on climate change, along with a mandate and support to cascade this training to the commune and village levels.
- Design and distribute handbooks on the NAPA for leaders at provincial, commune and village levels. These handbooks should employ appropriate terminology and should be rigorously pre-tested.
- Appoint climate change communications press officers in government positions. These people will communicate to journalists on climate change using accessible, non-scientific language and seek to provide appropriate news coverage at the regional, commune and national levels.
- All media organisations should have a list of climate change experts – including the government climate change press officers – who can “sense-check” information before it goes to air.

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Appendix 1: Methodology

Study Design

The study used a combination of qualitative and quantitative methods.

1. Qualitative Research Design

In-depth interviews were conducted in person with 101 representatives from media, industry, national and provincial government, celebrities, and local leaders, including commune council chiefs, village chiefs and elders, and religious leaders.

These key informants were recruited through a combination of purposive and snowball sampling techniques, in consultation with the CCD, Oxfam & UNDP teams. Appointments were fixed by telephone with those respondents who were available and willing to speak to our interviewers about climate change.

In-depth interviews were conducted using a semi-structured interview guideline. Interviews were recorded with the consent of participants. A note-taker observed, taking notes about responses, non-verbal expressions and communication, and the mood and tone of the participants.

Each interview was summarised in a short document on the day it was conducted. This summary highlighted key findings as well as any methodological issues that arose.

Recordings of each discussion and interview were transcribed verbatim to Khmer. These transcriptions were reviewed for accuracy and most were translated into English to allow for review by the London-based research team.

Data Analysis

A coding frame was developed through a consultative process with the research team in the UK and Cambodia. The coding frame was based on the research questions, and was further extended through open coding of a selection of the transcripts. For each code, the researchers worked together to produce a definition and a quote to illustrate the code. The definitions and example quotes were added to the list of codes to produce a final coding frame. The final coding frame was used by all of the researchers in the team. The codes in the coding frame were uploaded to Atlas.ti software, which the researchers then used to code and sort the in-depth interview transcripts. Coding relies on the judgement of the individual researcher. The researcher reads through the transcript, highlighting important sections of text and labelling them with one or more codes from the coding frame. The inter-coder reliability score achieved by the research team was 0.74. This score was generated by comparing the results of each researcher working on the coding and calculating the average number of times that the same code or different codes had been used on a selected piece of text by the researchers.

Once the coding process had been completed for all transcripts, the software allowed researchers to identify which themes were most prominent across the transcripts, and to select and group together all the quotations relating to each research question, so that they could be compared and analysed together. The interviews were analysed based on

this Atlas coding, as well as general textual analysis. Once the coding was completed for all transcripts, the researcher could select a code from a menu in Atlas, which generated a list of quotations that had been highlighted for that particular code. The researchers then read through these quotations and selected which quotations best illustrate the code.

II. Quantitative Research Design

A quantitative household based cross-sectional survey questionnaire was used to collect information from 2401 members of the public from all 24 provinces of Cambodia.

Target respondents for the survey were Cambodian men and women aged 15 – 55, including people particularly vulnerable to the effects of climate change.

Because of the small numbers of respondents from coastal and fishing communities included in the original sample, two booster samples were carried out to obtain samples of 35 people from these groups. As this was a purposive sample rather than a random sample, findings relating to the two fishing communities cannot be compared to the findings for the entire sample, and are not nationally representative.

Sampling

Multi-stage sampling using Probability Proportional to Size (PPS)⁴⁸ was used to select each primary sampling unit. Primary sampling units (PSU) were wards/villages. 2008 National Census data were used to select them.

Stage 1 – Selecting Primary Sampling Unit (PSU)

A total of 233 PSUs were selected across the 24 clusters of provinces shown in the table below. From each PSU, 12 or 13 respondents were selected, with the exception of seven provinces,⁴⁹ where only 10 respondents were selected.

Urban and rural respondents were sampled independently, with the number of rural and urban start points based upon the proportions shown in the table of sampling.

By using two lists of all urban villages and all rural PSUs in the province, the total cumulative population for each urban and rural location was calculated.

The cumulative population was divided by half of the number of start points in each province using separate lists for urban and rural locations.

A random number between one and the sampling number was selected, using the Excel random number function (RAND). The first cluster was the PSU in which this random number lay. Subsequent start points were identified by adding the sampling interval to the previous random number.

⁴⁸ *Probability Proportional to Size Sampling* (PPS) is a sampling technique, commonly used in multistage cluster sampling, in which the probability that a particular sampling unit will be selected in the sample is proportional to some known variable (e.g., in a population survey, usually the population size of the sampling unit). <http://www.cdc.gov/cogh/dgphcd/modules/MiniModules/PPS/page09.htm>. This method is less expensive and faster than simple random sampling but still generates a sample that is representative of the total population.

⁴⁹ Prey Veng, Siem Reap, Takeo, Kompong Speu, Banteay Meanchey and Kompong Thom and Phnom Penh.

For the purposes of this study, a system was designed in which each PSU that was randomly selected was paired with another randomly selected PSU in the same commune, to gather as wide a range of participants as financial and logistical constraints would allow. After the first PSU was randomly selected, the commune name was checked. All of the remaining PSUs in that commune were then listed in order to randomly select another PSU in the same area.

Table of Sampling

Province	Number of Participants			Number of villages
	Urban	Rural	Total	
Kompong Cham	100	151	251	25
Kandal	50	100	150	15
Battambang	50	100	150	15
Banteay Meanchey	40	60	100	10
Pursat	20	55	75	7
Pailin	20	55	75	7
Kompong Speu	40	60	100	10
Kompot	20	55	75	7
Preah Sihanouk	20	55	75	7
Koh Kong	20	55	75	7
Kep	20	55	75	7
Kratie	20	55	75	7
Ratanakiri	20	55	75	7
Stung Treng	20	55	75	7
Mondulkiri	20	55	75	7
Kompong Thom	40	60	100	10
Phnom Penh province	100	100	200	20
Prey Veng	40	60	100	10
Takeo	40	60	100	10
Siem Reap	40	60	100	10
Otdar Meanchey	20	55	75	7
Preah Vihear	20	55	75	7
Svay Rieng	20	55	75	7
Kompong Chhnang	20	55	75	7
TOTAL	700	1375	2401	233

Stage 2 – Selecting Households in Each Ward/ Village

Systematic random sampling was used to select 10/12/13 households per PSU.⁵⁰

The sampling interval used to select households in a PSU was calculated by dividing the total number of households in the PSU by the number of households (10/12/13) to be selected. In each village, a map was drawn, in consultation with the local authorities or village chief, to show the shape of the village. In urban wards, street maps were also used. Interviewers began from a central starting point in the ward or village, with the direction to travel varying for interviewers.

This stage excluded:

- Villages that would require more than a day of travel by road from the provincial capital.
- Villages with fewer than 25 households.
- Any individual who had participated in any research on climate change in the 3 months prior to the date of the interview, as determined by one of the first filtering questions at the beginning of the questionnaire.

Stage 3. Selecting the Respondent

At the household level, a KISH grid⁵¹ was used to randomly select an eligible household member to be included in the survey. The KISH grid was used to list all household members, which was then used to identify all 15-55 year olds. One respondent was selected from each household.

This stage excluded:

- Those who could not speak the Khmer language.
- People who were not at home on the day/evening when the interview team was in the PSU.

Quality Assurance

Supervisors were responsible for field supervision and quality throughout fieldwork, including the piloting of the research instruments.

Quality assurance was achieved through observation, spot checks and group meetings at the end of each working day. Supervisors conducted observations of selected interviews; the purpose of observation was to evaluate and improve interviewer performance and to look for errors and misinterpretation of questions that could not be detected through editing.

The supervisor also oversaw field editing; every questionnaire was checked for accuracy, completeness, eligibility and consistency while the team was in the field.

⁵⁰ The number of households in the village was confirmed by local authorities and the village chief when the teams reached the village, since sometimes the number of households in the lists is different from the actual number, due to population movements. If there was a difference, the actual number provided by the village chief was used rather than the number in the list.

⁵¹ Kish grid: a listing of all household members that is used for selecting a respondent from a household at random so that the entire sample reflects the makeup of the general population in terms of age, gender, and family status.

Spot checks were carried out by supervisors, who visited selected households to confirm that the interview had been conducted and to assess the attitude of interviewers toward household members and respondents.

Data Entry

Double data entry technique was done using Epi data and data was entered and checked throughout the data collection process. The double data entry approach was used to allow for comparison and validation.

On the questionnaires and during data entry, there was no information available that would allow respondents to be identified, and ID numbers were used instead of participant names on questionnaire scripts.

Data Analysis

Quantitative data analysis was done using SPSS software.

Analytical techniques employed include descriptive (frequencies) and bivariate statistics (t-tests, z-tests, chi-square) to describe and compare the differences in a number of key measures of knowledge, attitudes & practices regarding climate change. Chi-square tests were employed to test levels of association between non-parametric nominal variables. Z-tests were used to detect significant differences between proportional responses of survey sample subgroups. T-tests were used to detect significant differences in mean scores between discrete subgroups of the survey sample. In all instances, the probability interval was set at .95.

The sample was analysed according to the following comparative categories:

- Total sample
- Major geographic regions
- Area of residence (urban/ rural)
- Gender (male, female)
- Age breaks (15-24 yrs, 25-34 yrs, 35-44 yrs, 45-55 yrs)
- Education: no schooling, primary school, secondary school, high school and university
- Progress out of Poverty Index categories: Poorest, Poor, Medium, and High
- Occupational categories – farmers, business people, sales and services, skilled manual, housework/housewife, teacher, university student, non-university student, professional technical management, government officials, forestry workers, coastal fishermen/women, and freshwater fishermen/women.

III. Recruitment and Responsibilities

The qualitative fieldwork team (in-depth interviewers and note-takers) was made up of members of the Trust's Research and Learning team in Cambodia and carefully selected freelance recruiters with experience working for the Trust.

Each quantitative fieldwork team (survey team) consisted of four interviewers, a supervisor and field editor. In total, there were 36 fieldworkers divided into 6 teams. Male

interviewers interviewed male respondents, and female interviewers interviewed females.

Each team was responsible for fieldwork in four provinces. Interviewers conducted interviews; supervisors, who had fieldwork experience, managed the team's work in the field; and field editors ensured that all questionnaires were completed legibly and accurately.

IV. Training

The fieldwork teams were briefed on the project and trained about the specifics of the research by the BBC World Service Trust. The training objectives were:

- to brief all fieldworkers about the aims and objectives of the research;
- to introduce them to the key theoretical concepts being explored in the study;
- to improve their knowledge of relevant methods and research ethics;
- to provide skills-building practice sessions on interpersonal communication and field practice, using discussions and interviews.

Fieldwork

Fieldwork and travel were planned to allow data collection teams to stay overnight in some locations, in order to conduct discussions and family interviews at times during the day or evening that were convenient to respondents, and in order to include respondents who were away from home (for work or other reasons) during the day time.

Data Storage

All recordings, complete transcripts and survey questionnaires were stored on a secure computer drive during data collection, data processing and analysis. Only people responsible for data processing and analysis had access to these files. The files were identified with codes. The date, province and profile of respondents were used to identify files, but no information that would allow individual respondents to be identified was stored with the data.

V. Research Ethics

The Trust was responsible for obtaining permissions and authorizations from local authorities (e.g., police, district administrators) to operate in communities.

All interviewers and fieldwork team members were trained about ethical issues including confidentiality and anonymity.

All selected respondents were informed about the study and asked for their consent to participate in it. To obtain valid consent, the study used an introductory statement at the start of the survey questionnaire to ask permission from interviewees and to reassure them of the anonymity and confidentiality of the study. Respondents were able to skip questions or withdraw from the study at any time.

Appendix 2: List of Tables

Table 1: Socio-demographic profile

Base: All respondents

	All Respondents	
	%	#
Region		
Phnom Penh	8.3	200
Plain	28.2	676
Tonle Sap	31.2	750
Coastal	12.5	300
Mountain	19.8	475
Ethnicity		
Khmer	93.9	2254
Cham	2.0	47
Vietnamese	0.1	3
Laotian	0.1	3
Chinese	0.0	1
Khmer Lao	0.2	4
Indigenous	3.7	89
Household Member		
1-3	18.3	439
4-6	58.5	1404
7-Over	23.2	558
Age		
15-24	32.8	787
25-34	29.7	712
35-44	20.6	495
45-55	17.0	407
Education		
No Schooling	10.7	257
Primary School	41.1	988
Secondary School	28.4	682
High School	15.9	382
University	3.8	92
PPI Index		
Poorest(0-24)	10.7	257
Poor(25-49)	39.2	942
Medium(50-74)	40.0	960
High(75-100)	10.1	242
Working Youth		
No	79.2	1901
Yes	20.8	500
Landowner		
No	12.5	300
Yes	87.5	2101
Occupation		
Farmer	45.6	1096
Business person	16.2	390
Sales and services	4.4	105
Skilled Manual	4.0	96
Housework/housewife	5.9	142
Teacher	1.9	46
University Student	1.8	44
Non-university student	10.4	250
Professional-technical-management	3.7	90
Government official	3.9	93
Forestry Worker	0.2	5
<i>Coastal fisherman/woman</i>	1.5	35
<i>Freshwater fisherman/woman</i>	1.5	35

Table 2: Socio-demographic profile by gender and residence
Base: All respondents

	Base	Sex				Residence				
		Male		Female		Urban		Rural		
		%	#	%	#	%	#	%	#	
All Respondents	2401	50.1	1203	49.9	1198	34.2	820	65.8	1581	
Region(*)										
Phnom Penh	200	50.0	100	50.0	100	50.0	100	50.0	100	$X^2=37.07$ $df=4, p=0.000$
Plain	676	50.6	342	49.4	334	37.0	250	63.0	426	
Tonle Sap	750	49.2	369	50.8	381	33.3	250	66.7	500	
Coastal	300	50.7	152	49.3	148	26.7	80	73.3	220	
Mountain	475	50.5	240	49.5	235	29.5	140	70.5	335	
Ethnicity										
Khmer	2254	50.4	1136	49.6	1118	35.7	805	64.3	1449	
Cham	47	48.9	23	51.1	24	19.1	9	80.9	38	
Vietnamese	3	33.3	1	66.7	2	100.0	3	0.0	0	
Laotian	3	0.0	0	100.0	3	33.3	1	66.7	2	
Chinese	1	0.0	0	100.0	1	0.0	0	100.0	1	
Khmer Lao	4	25.0	1	75.0	3	25.0	1	75.0	3	
Indigenous	89	47.2	42	52.8	47	1.1	1	98.9	88	
Household Member										
1-3	439	46.5	204	53.5	235	32.3	142	67.7	297	
4-6	1404	51.9	728	48.1	676	33.2	466	66.8	938	
7-Over	558	48.6	271	51.4	287	38.0	212	62.0	346	
Age(*)										
15-24	787	47.8	376	52.2	411	38.9	306	61.1	481	$X^2=11.73$ $df=3, p=0.008$
25-34	712	51.0	363	49.0	349	31.7	226	68.3	486	
35-44	495	49.1	243	50.9	252	32.3	160	67.7	335	
45-55	407	54.3	221	45.7	186	31.4	128	68.6	279	
Education(*)										
No Schooling	257	39.7	102	60.3	155	18.7	48	81.3	209	$X^2=65.12$ $df=4, p=0.000$
Primary School	988	43.5	430	56.5	558	23.0	227	77.0	761	
Secondary School	682	55.3	377	44.7	305	36.8	251	63.2	431	$X^2=261.51$ $df=4, p=0.000$
High School	382	60.2	230	39.8	152	58.1	222	41.9	160	
University	92	69.6	64	30.4	28	78.3	72	21.7	20	
PPI Index(*)										
Poorest(0-24)	257	50.6	130	49.4	127	11.3	29	88.7	228	$X^2=344.88$ $df=3, p=0.000$
Poor(25-49)	942	52.4	494	47.6	448	20.0	188	80.0	754	
Medium(50-74)	960	48.3	464	51.7	496	44.7	429	55.3	531	
High(75-100)	242	47.5	115	52.5	127	71.9	174	28.1	68	
Working Youth(*)										
No	1901	51.8	985	48.2	916	36.0	684	64.0	1217	$X^2=10.67$ $X^2=13.57$ $df=1, p=0.001$ $df=1, p=0.000$
Yes	500	43.6	218	56.4	282	27.2	136	72.8	364	
Landowner(*)										
No	300	50.7	152	49.3	148	39.7	119	60.3	181	$X^2=4.64$ $df=1, p=0.031$
Yes	2101	50.0	1051	50.0	1050	33.4	701	66.6	1400	
Occupation(*)										
Farmer	1096	53.9	591	46.1	505	12.0	132	88.0	964	$X^2=212.11$ $df=12, p=0.000$
Business person	390	35.9	140	64.1	250	45.9	179	54.1	211	
Sales and services	105	61.0	64	39.0	41	50.5	53	49.5	52	$X^2=515.73$ $df=12, p=0.000$
Skilled Manual	96	59.4	57	40.6	39	49.0	47	51.0	49	
Housework/housewife	142	3.5	5	96.5	137	59.2	84	40.8	58	
Teacher	46	54.3	25	45.7	21	65.2	30	34.8	16	
University Student	44	68.2	30	31.8	14	72.7	32	27.3	12	
Non-university student	250	54.0	135	46.0	115	57.2	143	42.8	107	
Professional-technical-management	90	60.0	54	40.0	36	67.8	61	32.2	29	
Government official	93	77.4	72	22.6	21	54.8	51	45.2	42	
Forestry Worker	5	60.0	3	40.0	2	0.0	0	100.0	5	
<i>Coastal fisherman/woman</i>	35	54.3	19	45.7	16	8.6	3	91.4	32	
<i>Freshwater fisherman/woman</i>	35	65.7	23	34.3	12	14.3	5	85.7	30	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 3: Extreme weather events in the past year (Frequency Table)
Base: All respondents

Items	%	#
Very heavy rain	60.5	1452
Pest on agricultural production	52.2	1253
Very high temperatures	44.0	1056
Drought	41.1	986
Storm, Cyclone, Tonado	37.0	887
Flood	36.6	879
Very cold temperatures	30.2	725
Wildfire	17.0	408
No such event experienced in past year	6.6	158
Coastal storm surge	5.0	119
Landslide	1.5	36
Thunder	0.2	4
Base		2401

Table 5: “Which of these events had the most serious impact on your life?”
Base: Those who experienced an extreme weather event in the past year

	Which of these events had the most serious impact on your life?												
	Base	Pest on agricultural production		Drought		Very high temperatures		Storm, Cyclone, Tornado		Flood		Very heavy rain	
		%	#	%	#	%	#	%	#	%	#	%	#
All Respondents	2243	24.8	556	21.8	488	15.7	352	11.1	249	11.8	264	10.1	226
Sex													
Male	1184	25.8	306	25.3	300	19.1	226	8.6	102	10.4	123	6.6	78
Female	1059	23.6	250	17.8	188	11.9	126	13.9	147	13.3	141	14.0	148
Residence													
Urban	750	14.7	110	19.2	144	21.2	159	13.2	99	13.5	101	13.5	101
Rural	1493	29.9	446	23.0	344	12.9	193	10.0	150	10.9	163	8.4	125
Region													
Phnom Penh	177	10.7	19	22.0	39	37.9	67	6.2	11	6.8	12	14.1	25
Plain	607	31.3	190	26.5	161	17.3	105	12.0	73	3.1	19	6.6	40
Tonle Sap	711	18.1	129	28.8	205	16.9	120	10.4	74	13.8	98	6.6	47
Coastal	286	36.0	103	9.4	27	4.9	14	17.5	50	16.1	46	6.3	18
Mountain	462	24.9	115	12.1	56	10.0	46	8.9	41	19.3	89	20.8	96
Ethnicity (*)													
Khmer	2100	25.1	528	22.2	466	16.1	338	11.3	237	11.2	236	9.3	195
Indigenous people	89	24.7	22	9.0	8	10.1	9	6.7	6	16.9	15	25.8	23
Cham	44	11.4	5	29.5	13	9.1	4	11.4	5	25.0	11	9.1	4
Household Member													
1-3	407	20.6	84	21.9	89	18.4	75	10.8	44	12.8	52	10.8	44
4-6	1317	26.4	348	21.6	284	15.9	209	11.2	147	10.9	144	9.3	123
7-Over	519	23.9	124	22.2	115	13.1	68	11.2	58	13.1	68	11.4	59
Age													
15-24	748	22.5	168	18.2	136	18.0	135	12.2	91	11.9	89	13.1	98
25-34	659	24.7	163	23.1	152	16.7	110	10.0	66	12.0	79	8.8	58
35-44	461	25.2	116	24.3	112	13.0	60	11.1	51	12.1	56	8.7	40
45-55	375	29.1	109	23.5	88	12.5	47	10.9	41	10.7	40	8.0	30
Education													
No Schooling	243	29.6	72	16.0	39	9.5	23	9.5	23	12.8	31	12.8	31
Primary School	917	27.5	252	23.1	212	13.2	121	11.1	102	11.9	109	7.9	72
Secondary School	639	25.7	164	21.1	135	16.3	104	11.0	70	11.1	71	11.6	74
High School	358	17.0	61	22.1	79	22.3	80	10.9	39	12.6	45	11.7	42
University	86	8.1	7	26.7	23	27.9	24	17.4	15	9.3	8	8.1	7
PPI Index													
Poorest (0-24)	249	27.3	68	18.5	46	8.4	21	8.8	22	19.3	48	10.0	25
Poor (25-49)	895	30.9	277	22.6	202	12.0	107	10.1	90	12.1	108	7.9	71
Medium (50-74)	883	21.7	192	23.8	210	18.8	166	12.2	108	8.9	79	10.2	90
High (75-100)	216	8.8	19	13.9	30	26.9	58	13.4	29	13.4	29	18.5	40
Working Youth													
No	1773	24.4	432	22.8	404	15.8	280	11.1	197	12.0	212	9.1	162
Yes	470	26.4	124	17.9	84	15.3	72	11.1	52	11.1	52	13.6	64
Landowner													
No	273	12.5	34	22.3	61	23.1	63	12.5	34	8.1	22	15.8	43
Yes	1970	26.5	522	21.7	427	14.7	289	10.9	215	12.3	242	9.3	183
Occupation													
Farmer	1040	36.5	380	24.5	255	9.6	100	8.0	83	11.4	119	6.5	68
Business person	342	15.2	52	20.8	71	17.3	59	12.6	43	12.3	42	16.4	56
Sales and services	94	11.7	11	21.3	20	33.0	31	8.5	8	11.7	11	10.6	10
Skilled Manual	93	17.2	16	23.7	22	24.7	23	11.8	11	8.6	8	8.6	8
Housework/housewife	118	10.2	12	11.9	14	12.7	15	20.3	24	14.4	17	21.2	25
Teacher	42	19.0	8	21.4	9	23.8	10	16.7	7	7.1	3	7.1	3
University Student	41	7.3	3	26.8	11	17.1	7	19.5	8	12.2	5	12.2	5
Non-university student	243	16.5	40	18.1	44	24.3	59	12.8	31	13.6	33	11.9	29
Professional-technical-management	83	10.8	9	15.7	13	28.9	24	12.0	10	9.6	8	16.9	14
Government official	91	13.2	12	26.4	24	24.2	22	17.6	16	9.9	9	6.6	6
Forestry Worker	4	0.0	0	25.0	1	0.0	0	0.0	0	50.0	2	25.0	1
<i>Coastal fisherman/woman</i>	35	14.3	5	0.0	0	0.0	0	11.4	4	14.3	5	8.6	3
<i>Freshwater fisherman/woman</i>	35	14.3	5	11.4	4	5.7	2	34.3	12	11.4	4	2.9	1

$\chi^2 = 59.79$
 $df = 20$
 $P = 0.000$

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 6: Did you receive any information about the event you mentioned?
Base: Respondents who experienced an extreme weather event in the past year

	Base	Did you receive any information about the event you mentioned?						
		No		Yes		Don't Know		
		%	#	%	#	%	#	
All Respondents	2242	35.8	802	63.2	1417	1.0	23	
Sex(*)								
Male	1184	33.0	391	66.3	785	0.7	8	$\chi^2=12.10$ $df=2, P=0.002$
Female	1058	38.8	411	59.7	632	1.4	15	
Residence(*)								
Urban	749	27.9	209	71.3	534	0.8	6	$\chi^2=31.67$ $df=2, P=0.000$
Rural	1493	39.7	593	59.1	883	1.1	17	
Region(*)								
Phnom Penh	176	31.8	56	68.2	120	0.0	0	$\chi^2=44.58$ $df=8$ $P=0.000$
Plain	607	42.7	259	56.3	342	1.0	6	
Tonle Sap	711	35.0	249	63.4	451	1.5	11	
Coastal	286	22.0	63	77.6	222	0.3	1	
Mountain	462	37.9	175	61.0	282	1.1	5	
Ethnicity(*)								
Khmer	2099	34.7	729	64.2	1348	1.0	22	$\chi^2=21.61$ $df=4$ $P=0.000$
Indigenous people	89	58.4	52	40.4	36	1.1	1	
Cham	44	34.1	15	65.9	29	0.0	0	
Household Member								
1-3	407	33.4	136	66.3	270	0.2	1	
4-6	1316	36.6	482	62.1	817	1.3	17	
7-Over	519	35.5	184	63.6	330	1.0	5	
Age(*)								
15-24	748	30.9	231	68.3	511	0.8	6	$\chi^2=15.94$ $df=6$ $P=0.014$
25-34	658	37.5	247	61.7	406	0.8	5	
35-44	461	40.3	186	58.4	269	1.3	6	
45-55	375	36.8	138	61.6	231	1.6	6	
Education(*)								
No Schooling	243	55.6	135	43.2	105	1.2	3	$\chi^2=120.88$ $df=8$ $P=0.000$
Primary School	917	41.9	384	56.8	521	1.3	12	
Secondary School	638	30.1	192	68.8	439	1.1	7	
High School	358	22.6	81	77.1	276	0.3	1	
University	86	11.6	10	88.4	76	0.0	0	
PPI Index(*)								
Poorest (0-24)	249	47.8	119	51.0	127	1.2	3	$\chi^2=57.77$ $df=6$ $P=0.000$
Poor (25-49)	895	41.0	367	57.7	516	1.3	12	
Medium (50-74)	883	30.2	267	69.0	609	0.8	7	
High (75-100)	215	22.8	49	76.7	165	0.5	1	
Working Youth								
No	1772	35.7	632	63.4	1123	1.0	17	
Yes	470	36.2	170	62.6	294	1.3	6	
Landowner								
No	273	37.4	102	61.5	168	1.1	3	
Yes	1969	35.6	700	63.4	1249	1.0	20	
Occupation								
Farmer	1042	44.4	463	54.5	568	1.1	11	
Business person	346	34.7	120	64.2	222	1.2	4	
Sales and services	94	34.0	32	66.0	62	0.0	0	
Skilled Manual	93	39.8	37	60.2	56	0.0	0	
Housework/housewife	118	27.1	32	70.3	83	2.5	3	
Teacher	42	7.1	3	92.9	39	0.0	0	
University Student	41	12.2	5	87.8	36	0.0	0	
Non-university student	244	23.4	57	76.6	187	0.0	0	
Professional-technical-management	83	27.7	23	69.9	58	2.4	2	
Government official	91	15.4	14	83.5	76	1.1	1	
Forestry Worker	4	25.0	1	75.0	3	0.0	0	
<i>Coastal fisherman/woman</i>	35	37.1	13	62.9	22	0.0	0	
<i>Freshwater fisherman/woman</i>	35	34.3	12	60.0	21	5.7	2	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 7: In general, do you ever get information from the weather report?

Base: Respondents who received information about the extreme weather event they mentioned

	Base	In general, do you ever get information from the weather report?						
		No		Yes		Don't Know		
		%	#	%	#	%	#	
All Respondents	1417	37.0	524	62.2	881	0.8	12	
Sex								
Male	785	35.5	279	63.8	501	0.6	5	
Female	632	38.8	245	60.1	380	1.1	7	
Residence(*)								
Urban	534	27.9	149	71.3	381	0.7	4	$\chi^2=30.79$
Rural	883	42.5	375	56.6	500	0.9	8	$df=2, P=0.000$
Region(*)								
Phnom Penh	120	22.5	27	77.5	93	0.0	0	$\chi^2=42.19$
Plain	342	27.2	93	71.6	245	1.2	4	$df=8$
Tonle Sap	451	40.4	182	59.0	266	0.7	3	$P=0.000$
Coastal	222	46.4	103	53.2	118	0.5	1	
Mountain	282	42.2	119	56.4	159	1.4	4	
Ethnicity								
Khmer	1348	35.4	477	63.9	861	0.7	10	
Indigenous people	36	75.0	27	19.4	7	5.6	2	
Cham	29	62.1	18	37.9	11	0.0	0	
Household Member								
1-3	270	36.3	98	63.0	170	0.7	2	
4-6	817	37.6	307	61.3	501	1.1	9	
7-Over	330	36.1	119	63.6	210	0.3	1	
Age(*)								
15-24	511	31.9	163	66.9	342	1.2	6	$\chi^2=19.16$
25-34	406	41.9	170	57.9	235	0.2	1	$df=6$
35-44	269	37.9	102	62.1	167	0.0	0	$P=0.004$
45-55	231	38.5	89	59.3	137	2.2	5	
Education(*)								
No Schooling	105	75.2	79	21.9	23	2.9	3	$\chi^2=134.90$
Primary School	521	44.0	229	54.9	286	1.2	6	$df=8$
Secondary School	439	32.6	143	67.2	295	0.2	1	$P=0.000$
High School	276	22.5	62	76.8	212	0.7	2	
University	76	14.5	11	85.5	65	0.0	0	
PPI Index(*)								
Poorest (0-24)	127	61.4	78	37.0	47	1.6	2	$\chi^2=105.36$
Poor (25-49)	516	47.5	245	51.2	264	1.4	7	$df=6$
Medium (50-74)	609	26.1	159	73.4	447	0.5	3	$P=0.000$
High (75-100)	165	25.5	42	74.5	123	0.0	0	
Working Youth(*)								
No	1123	36.2	406	63.3	711	0.5	6	
Yes	294	40.1	118	57.8	170	2.0	6	$\chi^2=8.37, df=2, P=0.015$
Landowner								
No	168	40.5	68	57.7	97	1.8	3	
Yes	1249	36.5	456	62.8	784	0.7	9	
Occupation								
Farmer	568	48.2	274	50.2	285	1.6	9	
Business person	222	33.8	75	66.2	147	0.0	0	
Sales and services	62	30.6	19	69.4	43	0.0	0	
Skilled Manual	56	37.5	21	60.7	34	1.8	1	
Housework/housewife	83	36.1	30	62.7	52	1.2	1	
Teacher	39	15.4	6	84.6	33	0.0	0	
University Student	36	16.7	6	83.3	30	0.0	0	
Non-university student	187	21.9	41	78.1	146	0.0	0	
Professional-technical-management	58	32.8	19	67.2	39	0.0	0	
Government official	76	21.1	16	77.6	59	1.3	1	
Forestry Worker	3	33.3	1	66.7	2	0.0	0	
<i>Coastal fisherman/woman</i>	22	68.2	15	31.8	7	0.0	0	
<i>Freshwater fisherman/woman</i>	21	57.1	12	42.9	9	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 8: When did you hear about the event?

Base: Respondents who received information about the extreme weather event they mentioned

	Base	When do you hear about the event?								
		Before events		During events		After events		Don't Know		
		%	#	%	#	%	#	%	#	
All Respondents	1417	25.1	356	21.5	304	50.5	716	2.9	41	
Sex										
Male	785	25.2	198	20.5	161	52.0	408	2.3	18	
Female	632	25.0	158	22.6	143	48.7	308	3.6	23	
Residence										
Urban	534	25.8	138	21.3	114	50.6	270	2.2	12	
Rural	883	24.7	218	21.5	190	50.5	446	3.3	29	
Region(*)										
Phnom Penh	120	35.8	43	20.0	24	<i>40.0</i>	48	4.2	5	$\chi^2=58.53$ $df=12$ $P=0.000$
Plain	342	30.7	105	16.7	57	51.5	176	1.2	4	
Tonle Sap	451	19.5	88	20.2	91	56.5	255	3.8	17	
Coastal	222	24.8	55	32.4	72	42.8	95	0.0	0	
Mountain	282	23.0	65	21.3	60	50.4	142	5.3	15	
Ethnicity										
Khmer	1348	25.1	339	21.5	290	50.7	683	2.7	36	
Indigenous people	36	22.2	8	11.1	4	52.8	19	13.9	5	
Cham	29	24.1	7	34.5	10	41.4	12	0.0	0	
Household Member										
1-3	270	29.3	79	19.6	53	48.9	132	2.2	6	$\chi^2=13.87$ $df=6, p=0.31$
4-6	817	25.8	211	19.6	160	51.5	421	3.1	25	
7-Over	330	20.0	66	27.6	91	49.4	163	3.0	10	
Age										
15-24	511	27.6	141	19.6	100	51.1	261	1.8	9	
25-34	406	24.9	101	24.1	98	48.5	197	2.5	10	
35-44	269	23.4	63	21.6	58	50.2	135	4.8	13	
45-55	231	22.1	51	20.8	48	53.2	123	3.9	9	
Education										
No Schooling	105	19.0	20	26.7	28	50.5	53	3.8	4	
Primary School	521	24.4	127	22.5	117	49.1	256	4.0	21	
Secondary School	439	24.1	106	20.7	91	52.8	232	2.3	10	
High School	276	29.0	80	19.2	53	50.4	139	1.4	4	
University	76	30.3	23	19.7	15	47.4	36	2.6	2	
PPI Index(*)										
Poorest (0-24)	127	22.0	28	18.1	23	53.5	68	6.3	8	$\chi^2=30.55$ $df=9$ $P=0.000$
Poor (25-49)	516	21.1	109	28.1	145	48.3	249	2.5	13	
Medium (50-74)	609	27.8	169	17.7	108	51.9	316	2.6	16	
High (75-100)	165	30.3	50	17.0	28	50.3	83	2.4	4	
Working Youth										
No	1123	24.5	275	21.9	246	50.7	569	2.9	33	
Yes	294	27.6	81	19.7	58	50.0	147	2.7	8	
Landowner										
No	168	25.6	43	22.6	38	49.4	83	2.4	4	
Yes	1249	25.1	313	21.3	266	50.7	633	3.0	37	
Occupation										
Farmer	568	22.2	126	23.4	133	51.1	290	3.3	19	
Business person	222	25.7	57	18.0	40	53.6	119	2.7	6	
Sales and services	62	24.2	15	21.0	13	50.0	31	4.8	3	
Skilled Manual	56	32.1	18	26.8	15	39.3	22	1.8	1	
Housework/housewife	83	27.7	23	24.1	20	45.8	38	2.4	2	
Teacher	39	30.8	12	12.8	5	51.3	20	5.1	2	
University Student	36	27.8	10	16.7	6	55.6	20	0.0	0	
Non-university student	187	27.8	52	19.3	36	52.4	98	0.5	1	
Professional-technical-management	58	24.1	14	17.2	10	53.4	31	5.2	3	
Government official	76	28.9	22	17.1	13	51.3	39	2.6	2	
Forestry Worker	3	0.0	0	66.7	2	33.3	1	0.0	0	
Coastal fisherman/woman	22	40.9	9	27.3	6	31.8	7	0.0	0	
Freshwater fisherman/woman	21	33.3	7	28.6	6	23.8	5	14.3	3	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 9: Source of information on extreme weather event (Frequency Table)

Base: Respondents who received information about the extreme weather event they mentioned

Items	%	#
TV	58.7	831
Radio	51.9	734
Neighbour	36.8	521
Family member	13.4	189
Friend	11.9	168
Myself	10.1	143
Newspaper	8.3	118
Authorities	7.8	110
School	3.3	47
Weather report	3.0	42
Others	1.5	21
Base		1415

Table 10: Where did you get this information from?

Base: Respondents who received information about the extreme weather event they mentioned

	Where did you get this information from?																								
	Base	TV		Radio		Neighbour		Family Member		Friend		Myself									Newspaper		Authorities		
		%	#	%	#	%	#	%	#	%	#	%									#	%	#	%	#
All Respondents	1415	58.7	831	51.9	734	36.8	521	13.4	189	11.9	168	10.1	143	8.3	118	7.8	110								
Sex(*)																									
Male	783	61.6	482	57.7	452	33.3	261	11.3	89	15.7	123	12.6	99	9.7	76	8.3	65								
Female	632	55.2	349	44.6	282	41.1	260	15.8	100	7.1	45	7.0	44	6.6	42	7.1	45								
Residence(*)																									
Urban	534	75.1	401	47.9	256	27.5	147	11.2	60	14.4	77	8.1	43	13.7	73	4.5	24								
Rural	881	48.8	430	54.3	478	42.5	374	14.6	129	10.3	91	11.4	100	5.1	45	9.7	86								
Region(*)																									
Phnom Penh	119	83.2	99	47.1	56	26.1	31	7.5	9	8.4	10	0.8	1	18.3	22	2.5	3								
Plain	342	67.3	230	56.4	193	35.4	121	9.9	34	12.0	41	2.3	8	12.6	43	8.8	30								
Tonle Sap	450	53.1	239	50.4	227	32.4	146	13.1	59	9.8	44	15.6	70	3.8	17	4.7	21								
Coastal	222	52.7	117	46.4	103	48.2	107	14.4	32	12.6	28	14.0	31	3.6	8	7.7	17								
Mountain	282	51.8	146	55.0	155	41.1	116	19.5	55	16.0	45	11.7	33	9.9	28	13.8	39								
Ethnicity(*)																									
Khmer	1346	60.2	810	51.6	694	36.5	491	13.5	182	43.7	588	10.0	135	9.3	125	7.1	96								
Indigenous people	36	16.7	6	66.7	24	41.7	15	16.7	6	44.4	16	8.3	3	0.0	0	36.1	13								
Cham	29	48.3	14	48.3	14	44.8	13	0.0	0	48.3	14	17.2	5	3.4	1	0.0	0								
Household Member(*)																									
1-3	270	52.6	142	58.5	158	42.2	114	13.3	36	48.5	131	7.4	20	9.3	25	5.2	14								
4-6	816	60.3	492	47.4	387	35.8	292	13.5	110	43.3	353	10.6	87	9.1	74	8.3	68								
7-Over	329	59.9	197	57.4	189	35.0	115	13.1	43	41.3	136	10.9	36	8.5	28	8.5	28								
Age(*)																									
15-24	511	61.4	314	55.0	281	34.2	175	15.1	77	16.4	84	9.8	50	10.6	54	7.6	39								
25-34	405	56.8	230	47.7	193	41.7	169	12.3	50	13.6	55	11.4	46	9.4	38	7.4	30								
35-44	269	57.2	154	50.9	137	36.8	99	14.5	39	6.3	17	10.8	29	7.1	19	7.4	20								
45-55	230	57.8	133	53.5	123	33.9	78	10.0	23	5.2	12	7.8	18	3.0	7	9.1	21								
Education(*)																									
No Schooling	104	34.6	36	45.2	47	49.0	51	14.3	15	6.7	7	9.6	10	0.0	0	16.2	17								
Primary School	521	48.9	255	51.2	267	41.3	215	14.4	75	6.9	36	11.1	58	2.5	13	8.1	42								
Secondary School	438	61.9	271	50.7	222	37.7	165	14.1	62	12.3	54	11.6	51	7.1	31	6.6	29								
High School	276	73.9	204	55.1	152	28.3	78	11.2	31	20.3	56	6.9	19	18.1	50	6.9	19								
University	76	85.5	65	60.5	46	15.8	12	7.9	6	19.7	15	6.6	5	31.6	24	3.9	3								
PPI Index(*)																									
Poorest (0-24)	127	30.7	39	53.5	68	47.2	60	13.4	17	8.7	11	7.9	10	2.4	3	17.3	22								
Poor (25-49)	515	48.3	249	53.6	276	39.4	203	15.3	79	10.1	52	14.0	72	3.9	20	8.7	45								
Medium (50-74)	608	67.8	412	51.2	311	35.7	217	11.3	69	12.7	77	8.9	54	10.5	64	6.1	37								
High (75-100)	165	79.4	131	47.9	79	24.8	41	14.5	24	17.0	28	4.2	7	18.8	31	3.6	6								
Working Youth(*)																									
No	1121	60.6	679	51.7	579	35.8	401	12.2	137	12.0	135	10.0	112	9.0	101	7.5	84								
Yes	294	51.7	152	52.7	155	40.8	120	17.7	52	11.2	33	10.5	31	5.8	17	8.8	26								
Landowner(*)																									
No	168	55.4	93	41.7	70	39.3	66	11.9	20	15.5	26	11.3	19	10.1	17	6.0	10								
Yes	1247	59.2	738	53.2	664	36.5	455	13.5	169	11.4	142	9.9	124	8.1	101	8.0	100								
Occupation(*)																									
Farmer	567	44.6	253	55.0	312	40.7	231	14.4	82	7.6	43	13.9	79	3.2	18	10.6	60								
Business person	222	63.5	141	40.5	90	42.3	94	16.2	36	9.9	22	8.6	19	7.7	17	5.0	11								
Sales and services	61	73.8	45	54.1	33	37.7	23	9.7	6	11.5	7	8.2	5	16.1	10	4.8	3								
Skilled Manual	56	67.9	38	51.8	29	37.5	21	14.3	8	17.9	10	12.5	7	7.1	4	7.1	4								
Housework/housewife	83	61.4	51	36.1	30	41.0	34	12.0	10	2.4	2	1.2	1	4.8	4	4.8	4								
Teacher	39	69.2	27	56.4	22	38.5	15	15.4	6	12.8	5	2.6	1	23.1	9	7.7	3								
University Student	36	86.1	31	66.7	24	11.1	4	11.1	4	16.7	6	5.6	2	30.6	11	5.6	2								
Non-university student	187	72.7	136	56.1	105	27.8	52	11.8	22	24.6	46	9.1	17	14.4	27	5.9	11								
Professional-technical-management	58	70.7	41	51.7	30	25.9	15	13.8	8	19.0	11	6.9	4	13.8	8	3.4	2								
Government official	76	73.7	56	57.9	44	21.1	16	7.9	6	15.8	12	5.3	4	11.8	9	13.2	10								
Forestry Worker	3	33.3	1	66.7	2	100.0	3	0.0	0	33.3	1	33.3	1	0.0	0	0.0	0								
<i>Coastal fisherman/woman</i>	22	36.4	8	36.4	8	45.5	10	9.1	2	9.1	2	4.5	1	0.0	0	0.0	0								
<i>Freshwater fisherman/woman</i>	21	42.9	9	57.1	12	38.1	8	4.8	1	4.8	1	14.3	3	4.8	1	0.0	0								

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 11: How would information have helped you to prepare for such an event? (Frequency Table)

Base: Respondents who receive information about the extreme weather event they mentioned

Items	%	#
Prepare materials	51.6	717
Help each other to prepare for events	45.6	634
Buy pesticide	21.1	293
Move to place of safety	20.2	281
Prepare sufficient food	20.2	281
Plant more trees	8.9	124
Store water	7.1	98
Construct irrigation system	4.2	59
Technical treatment	3.4	47
Healthcare	0.9	13
Base (missing 28)		1389

Table 12: Thinking about your entire life, which of the following are true?

Base: All respondents

	TRUE		FALSE		Don't Know	
	%	#	%	#	%	#
Temperature has increased/got hotter	98.7	2369	1.3	31	0.0	1
Less rain	91.7	2201	8.0	192	0.3	8
Less intense rain	90.8	2179	8.8	212	0.4	10
Rains are less predictable	84.6	2032	10.9	262	4.5	107
Seasons start and finish at a different time than they used to	83.0	1993	13.1	314	3.9	94
Drought is more frequent	66.7	1601	32.5	780	0.8	20
More rain	66.2	1589	33.1	794	0.7	18
Seasons are less predictable	65.2	1565	24.8	596	10.0	240
More intense rain	64.8	1556	34.4	825	0.8	20
Drought is more intense	60.1	1442	39.4	945	0.6	14
More windstorms	45.9	1103	52.8	1266	1.2	31
Flooding is more intense	44.2	1062	54.9	1318	0.9	21
Temperature has decreased/got colder	41.3	992	57.4	1379	1.2	30
Flooding is more frequent	35.1	842	64.0	1537	0.9	21
Tides are higher than they used to be	7.3	174	39.3	935	53.4	1292
Seawater intrusion has got worse	6.7	159	39.7	945	53.6	1297
Coastal erosion has got worse	6.0	144	39.7	946	54.2	1311
Base			2401			

Table 13: Thinking about your entire life, which of the following are true? (Part I)
Base: All respondents

	Think that the event below is true within their entire life														
	Base	Temperature has increased/got		Less rain		Less intense rain		Rains are less predictable		Seasons start and finish at a different time		Drought is more frequent		More rain	
		%	#	%	#	%	#	%	#	%	#	%	#	%	#
All Respondents	2401	98.7	2369	91.7	2201	90.8	2179	84.6	2032	83.0	1993	66.7	1601	66.2	1589
Sex (*)															
Male	1203	98.9	1190	92.2	1109	91.4	1100	81.5	981	81.9	985	72.6	873	62.5	752
Female	1198	98.4	1179	91.2	1092	90.1	1079	87.7	1051	84.1	1008	60.8	728	69.9	837
															$\chi^2=25.82$ $\chi^2=39.17$ $\chi^2=20.44$ $\chi^2=20.118$ $\chi^2=35.49$ $df=2,P=0.00$ $df=2,P=0.0000$ $df=2,P=0.0000$ $df=2,P=0.0000$ $df=2,P=0.0000$
Residence (*)															
Urban	820	99.3	814	88.9	729	89.8	736	86.5	709	84.4	692	59.3	486	65.2	535
Rural	1581	98.4	1555	93.1	1472	91.3	1443	83.7	1323	82.3	1301	70.5	1115	66.7	1054
															$\chi^2=30.89$ $\chi^2=46.13$ $\chi^2=9.50$ $df=2,P=0.00$ $df=2,P=0.0000$ $df=2,P=0.009$
Region (*)															
Phnom Penh	200	99.5	199	94.0	188	94.5	189	97.0	194	89.5	179	60.0	120	69.0	138
Plain	676	99.4	672	92.0	622	89.5	605	86.8	587	86.5	585	72.9	493	52.8	357
Tonle Sap	750	98.9	742	92.4	693	91.7	688	83.2	624	84.1	631	70.9	532	64.7	485
Coastal	300	98.3	295	89.0	267	85.7	257	83.3	250	75.0	225	64.7	194	69.0	207
Mountain	475	97.1	461	90.7	431	92.6	440	79.4	377	78.5	373	55.2	262	84.6	402
															$\chi^2=82.25$ $\chi^2=62.77$ $\chi^2=54.31$ $df=8$ $df=8$ $df=8$
Ethnicity (*)															
Khmer	2253	98.9	2228	92.3	2074	91.4	2051	88.9	1926	86.7	1885	67.7	1515	65.7	1469
Indigenous people	89	94.4	84	85.4	76	88.6	78	80.3	57	80.0	60	55.8	48	89.9	80
Cham	47	97.9	46	89.1	41	85.1	40	82.6	38	80.4	37	68.1	32	63.8	30
															$\chi^2=6.02$ $\chi^2=6.67$ $\chi^2=6.06$ $df=2$ $df=2$ $df=2$ $p=0.045$ $p=0.036$ $p=0.048$
Household Member (*)															
1-3	439	98.9	434	94.0	410	90.8	397	87.9	369	86.6	367	66.7	291	65.1	284
4-6	1403	99.1	1390	91.1	1275	91.1	1273	88.8	1194	86.6	1166	66.4	924	66.0	918
7-Over	558	97.7	545	92.5	516	91.4	509	88.7	469	85.7	460	69.7	386	69.6	387
															$\chi^2=6.26$ $\chi^2=9.26$ $\chi^2=6.73$ $df=2, p=0.04$ $df=2, p=0.010$ $df=2, p=0.035$
Age															
15-24	787	98.5	775	89.7	706	89.6	705	84.9	668	81.7	643	60.1	473	67.9	534
25-34	712	99.0	705	93.7	667	91.0	648	86.1	613	84.4	601	68.0	484	67.8	483
35-44	495	99.2	491	93.3	462	92.7	459	85.7	424	85.1	421	71.7	355	64.4	319
45-55	407	97.8	398	89.9	366	90.2	367	80.3	327	80.6	328	71.0	289	62.2	253
Education															
No Schooling	257	98.8	254	94.2	242	89.9	231	81.7	210	80.5	207	66.5	171	72.8	187
Primary School	988	98.5	973	94.1	930	92.1	910	82.8	818	82.4	814	70.5	697	67.8	670
Secondary School	682	98.8	674	88.9	606	89.1	608	85.0	580	82.1	560	64.2	438	64.4	439
High School	382	98.7	377	89.0	340	90.3	345	88.5	338	84.6	323	60.7	232	65.4	250
University	92	98.9	91	90.2	83	92.4	85	93.5	86	96.7	89	68.5	63	46.7	43
PPI Index															
Poorest (0-24)	257	96.9	249	91.4	235	93.4	240	76.3	196	77.0	198	69.3	178	80.9	208
Poor (25-49)	942	98.7	930	94.3	888	91.1	858	83.8	789	80.7	760	69.9	658	63.7	600
Medium (50-74)	960	99.3	953	90.8	872	90.3	867	87.0	835	85.5	821	66.0	634	65.4	628
High (75-100)	242	97.9	237	85.1	206	88.4	214	87.6	212	88.4	214	54.1	131	63.2	153
Working Youth															
No	1901	98.8	1878	92.0	1748	90.8	1727	84.8	1612	83.5	1587	67.4	1282	65.8	1251
Yes	500	98.2	491	90.6	453	90.4	452	84.0	420	81.2	406	63.8	319	67.6	338
Landowner															
No	300	99.0	297	90.3	271	90.7	272	80.3	241	79.7	239	63.7	191	68.7	206
Yes	2101	98.6	2072	91.9	1930	90.8	1907	85.2	1791	83.5	1754	67.1	1410	65.8	1383
Occupation															
Farmer	1096	98.3	1077	93.3	1023	91.9	1007	82.8	907	81.8	897	74.1	812	65.6	719
Business person	390	98.5	384	89.7	350	92.6	361	89.5	349	85.6	334	61.5	240	66.9	261
Sales and services	105	100.0	105	89.5	94	92.4	97	86.7	91	88.6	93	69.5	73	63.8	67
Skilled Manual	96	100.0	96	93.8	90	88.5	85	84.4	81	80.2	77	64.6	62	65.6	63
Housework/housewife	142	98.6	140	93.0	132	85.9	122	88.0	125	83.8	119	45.8	65	73.2	104
Teacher	46	100.0	46	93.5	43	87.0	40	89.1	41	89.1	41	80.4	37	47.8	22
University Student	44	97.7	43	86.4	38	86.4	38	93.2	41	90.9	40	65.9	29	52.3	23
Non-university student	250	99.2	248	88.8	222	88.8	222	85.6	214	81.6	204	52.8	132	70.4	176
Professional-technical-management	90	98.9	89	90.0	81	88.9	80	81.1	73	84.4	76	60.0	54	66.7	60
Government official	93	98.9	92	88.2	82	87.1	81	81.7	76	81.7	76	67.7	63	53.8	50
Forestry Worker	5	100.0	5	80.0	4	100.0	5	60.0	3	80.0	4	80.0	4	100.0	5
Coastal fisherman/woman	35	100.0	35	94.3	33	94.3	33	82.9	29	82.9	29	74.3	26	85.7	30
Freshwater fisherman/woman	35	100.0	35	91.4	32	94.3	33	74.3	26	74.3	26	65.7	23	97.1	34

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

**Table 14: Thinking about your entire life, which of the following are true? (Part II)
Base: All respondents**

	Think that the event below is true within their entire life														
	Base	Seasons are less predictable		More intense rain		Drought is more intense		More windstorms		Flooding is more intense		Temperature has decreased/got colder		Flooding is more frequent	
		%	#	%	#	%	#	%	#	%	#	%	#	%	#
All Respondents	2401	65.2	1565	64.8	1556	60.1	1442	45.9	1103	44.2	1062	41.3	992	35.1	842
Sex (*)															
Male	1203	69.6	835	59.0	710	58.4	703	47.5	571	42.8	515	36.4	438	39.3	472
Female	1198	61.1	730	70.6	846	61.7	739	44.5	532	45.7	547	46.2	554	30.9	370
Residence (*)															
Urban	820	64.4	528	64.9	532	51.2	420	44.9	368	47.0	385	41.7	342	34.8	285
Rural	1581	65.8	1037	64.8	1024	64.6	1022	46.6	735	42.8	677	41.1	650	35.2	557
Region (*)															
Phnom Penh	200	72.5	145	73.0	146	45.5	91	51.5	103	41.0	82	45.0	90	36.0	72
Plain	676	72.2	488	54.9	371	64.3	435	48.9	330	42.8	289	29.7	201	33.5	226
Tonle Sap	750	63.8	477	62.4	468	67.7	508	46.9	351	51.5	386	40.8	306	37.7	283
Coastal	300	60.8	180	64.7	194	64.3	193	53.3	160	36.0	108	47.3	142	32.7	98
Mountain	475	57.9	275	79.4	377	45.3	215	33.5	159	41.5	197	53.3	253	34.3	163
Ethnicity (*)															
Khmer	2253	72.8	1490	64.7	1445	60.5	1357	47.3	1052	45.1	1007	41.2	917	35.6	796
Indigenous people	89	59.7	37	83.1	74	51.7	45	26.1	23	31.0	27	54.5	48	27.9	24
Cham	47	75.0	33	58.7	27	72.3	34	44.7	21	44.7	21	42.6	20	40.4	19
Household Member (*)															
1-3	439	71.4	279	64.3	279	62.8	275	45.3	197	41.7	182	42.1	184	30.7	134
4-6	1403	72.4	920	65.0	905	60.3	843	47.3	654	45.5	633	40.2	556	36.0	499
7-Over	558	73.2	366	67.1	372	58.8	324	45.8	252	44.7	247	45.7	252	37.6	209
Age															
15-24	787	60.2	473	65.7	517	48.2	379	40.4	318	38.9	306	41.4	326	33.0	259
25-34	712	66.9	475	67.0	477	63.6	453	47.5	338	46.9	334	42.1	300	35.5	253
35-44	495	69.5	344	60.6	300	64.0	317	49.0	242	45.1	223	42.0	208	35.6	176
45-55	407	67.6	273	64.4	262	72.0	293	50.5	205	48.9	199	38.8	158	37.8	154
Education															
No Schooling	257	61.1	157	66.9	172	68.1	175	44.7	115	41.2	106	44.0	113	34.6	89
Primary School	988	65.4	644	66.6	658	70.3	695	50.1	494	47.1	465	42.4	419	36.0	356
Secondary School	682	64.5	438	63.0	430	55.4	378	43.2	294	43.0	293	40.9	279	32.8	224
High School	382	66.2	253	65.2	249	41.1	157	42.4	162	40.3	154	39.8	152	36.7	140
University	92	79.3	73	51.1	47	40.2	37	41.3	38	47.8	44	31.5	29	35.9	33
PPI Index															
Poorest (0-24)	257	56.6	145	73.2	188	66.1	170	41.6	107	48.2	124	44.7	115	41.6	107
Poor (25-49)	942	64.3	604	61.3	577	66.7	628	47.6	447	42.9	404	40.7	383	34.7	327
Medium (50-74)	960	68.1	653	64.9	623	55.8	536	45.5	436	45.2	434	41.6	399	34.6	332
High (75-100)	242	67.6	163	69.4	168	44.6	108	46.7	113	41.3	100	39.3	95	31.5	76
Working Youth															
No	1901	67.0	1271	64.7	1230	62.2	1182	47.4	900	45.5	865	41.1	782	35.5	675
Yes	500	58.9	294	65.2	326	52.0	260	40.6	203	39.4	197	42.0	210	33.4	167
Landowner															
No	300	61.4	183	69.3	208	56.7	170	47.7	143	40.0	120	44.7	134	32.0	96
Yes	2101	65.9	1382	64.2	1348	60.5	1272	45.8	960	44.8	942	40.8	858	35.5	746
Occupation															
Farmer	1096	65.4	715	62.1	681	69.9	766	45.2	495	43.7	479	38.3	420	37.0	406
Business person	390	67.7	264	70.5	275	54.1	211	49.5	193	45.6	178	45.6	178	31.5	123
Sales and services	105	74.0	77	62.9	66	52.4	55	51.4	54	49.5	52	44.8	47	40.0	42
Skilled Manual	96	59.4	57	67.7	65	57.3	55	44.8	43	44.8	43	42.7	41	34.4	33
Housework/housewife	142	54.9	78	72.5	103	57.7	82	43.7	62	50.0	71	50.7	72	31.0	44
Teacher	46	78.3	36	56.5	26	43.5	20	52.2	24	43.5	20	32.6	15	37.0	17
University Student	44	75.0	33	59.1	26	38.6	17	43.2	19	43.2	19	27.3	12	29.5	13
Non-university student	250	61.2	153	67.2	168	42.4	106	40.8	102	37.2	93	42.4	106	32.9	82
Professional-technical-management	90	67.8	61	62.2	56	52.2	47	38.9	35	43.3	39	38.9	35	32.2	29
Government official	93	68.1	62	58.1	54	49.5	46	46.2	43	44.1	41	47.3	44	39.8	37
Forestry Worker	5	60.0	3	80.0	4	60.0	3	20.0	1	60.0	3	20.0	1	40.0	2
Coastal fisherman/woman	35	71.4	25	77.1	27	68.6	24	82.9	29	37.1	13	54.3	19	22.9	8
Freshwater fisherman/woman	35	57.1	20	80.0	28	77.1	27	76.5	26	68.6	24	57.1	20	45.7	16

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 15: When you think about natural resources in Cambodia, what would you say are the three most important natural resources?

Base: All respondents

Items	Ranking Important natural resource for Cambodia							
	1 st		2 nd		3 rd		Cumulative	
	%	#	%	#	%	#	%	#
Forest	50.7	1218	15.7	377	6.6	159	29.7	1754
Water	9.8	236	13.9	334	9.3	223	13.4	793
Mine	9.5	229	8.4	202	6.7	162	10.0	593
Mountain	4.7	113	8.6	206	6.2	150	7.9	469
Land	3.8	92	6.7	162	6.9	166	7.1	420
Fish	3.5	83	7.1	171	6.4	154	6.9	408
Wind	2.6	63	5.3	127	5.4	129	5.4	319
Living being in wild	1.3	32	6.4	154	4.5	107	5.0	293
Rain	3.0	72	2.7	66	2.0	48	3.2	186
River	1.9	45	2.9	70	2.7	66	3.1	181
Don't know	5.3	128	0.0	0	0.0	0	2.2	128
Sea	0.9	21	1.7	40	1.5	35	1.6	96
Lake	0.3	7	0.7	18	0.8	20	0.8	45
Grass/papaya tree/root	0.6	15	1.0	24	0.1	2	0.7	41
Other	0.8	19	1.0	23	1.3	31	1.2	73
Living being in the water	0.4	9	0.5	12	0.7	17	0.6	38
Sun/earth	0.2	6	0.5	13	0.7	18	0.6	37
Rice	0.5	13	0.2	6	0.4	10	0.5	29

Table 16: Priorities for Cambodia
Base: All respondents

	Not a priority		Priority		High priority		Don't know	
	%	#	%	#	%	#	%	#
Health	0.8	19	5.9	142	93.1	2235	0.2	5
Deforestation	1.9	46	10.2	245	86.6	2079	1.3	31
Drought	2.8	67	12.0	287	84.7	2034	0.5	13
Education	1.0	25	13.9	334	84.4	2026	0.7	16
Unemployment	2.1	51	14.8	355	82.6	1984	0.5	11
Drug problems	4.7	112	15.9	381	76.8	1844	2.7	64
Global warming	3.5	84	17.0	408	76.1	1826	3.5	83
Climate change	3.5	84	20.4	489	74.9	1799	1.2	29
Illegal logging	3.8	92	19.1	458	74.0	1777	3.0	74
Traffic accidents	4.1	98	24.9	597	69.7	1674	1.3	32
Illegal fishing	4.7	113	23.4	562	68.8	1652	3.1	74
Development	2.6	62	25.6	614	68.4	1642	3.5	83
Land conflict	5.7	138	23.0	553	68.3	1641	2.9	69
Gangsters	4.9	117	24.8	595	68.1	1635	2.2	54
Economic crisis	2.6	63	21.4	515	68.0	1633	7.9	190
HIV and AIDS	6.7	160	25.1	602	67.1	1612	1.1	27
Robbery	6.4	153	25.2	604	66.8	1603	1.7	41
Land rights	4.9	118	26.6	639	65.0	1560	3.5	84
Rights of children	4.7	114	32.4	778	60.5	1453	2.3	56
Rights of women	5.2	126	32.0	768	60.2	1445	2.6	62
Corruption	16.7	400	17.0	407	58.3	1399	8.1	195
Domestic violence	8.8	212	29.0	696	58.0	1392	4.2	101
Flooding	12.4	297	27.9	671	57.7	1386	2.0	47
Illegal migration	7.2	173	24.4	586	57.6	1382	10.8	260
Base		2401		2401		2401		2401

Table 17: Have you ever heard the term 'climate change'?
Base: All respondents

	Base	Climate change						
		No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2401	15.9	382	83.9	2014	0.2	5	
Sex(*)								
Male	1203	12.4	149	87.5	1053	0.1	1	$x^2=24.46$ $df=2, P=0.000$
Female	1198	19.4	233	80.2	961	0.3	4	
Residence(*)								
Urban	820	9.0	74	90.6	743	0.4	3	$x^2=41.82$ $df=2, P=0.000$
Rural	1581	19.5	308	80.4	1271	0.1	2	
Region(*)								
Phnom Penh	200	6.0	12	94.0	188	0.0	0	$x^2=61.39$ $df=8$
Plain	676	11.2	76	88.5	598	0.3	2	
Tonle Sap	750	18.4	138	81.3	610	0.3	2	$P=0.000$
Coastal	300	12.7	38	87.3	262	0.0	0	
Mountain	475	24.8	118	74.9	356	0.2	1	
Ethnicity(*)								
Khmer	2254	14.4	325	85.4	1924	0.2	5	$x^2=55.87$ $x^2=55.87$ $df=4$ $df=4$ $P=0.000$ $P=0.000$
Indigenous people	89	47.2	42	52.8	47	0.0	0	
Cham	47	21.3	10	78.7	37	0.0	0	
Household Member								
1-3	439	15.7	69	84.1	369	0.2	1	
4-6	1404	15.7	220	84.1	1181	0.2	3	
7-Over	558	16.7	93	83.2	464	0.2	1	
Age(*)								
15-24	787	13.2	104	86.7	682	0.1	1	$x^2=22.31$ $df=6$
25-34	712	13.6	97	86.2	614	0.1	1	
35-44	495	21.4	106	78.4	388	0.2	1	$P=0.001$
45-55	407	18.4	75	81.1	330	0.5	2	
Education(*)								
No Schooling	257	40.1	103	59.9	154	0.0	0	$x^2=215.96$ $df=8$
Primary School	988	20.3	201	79.3	783	0.4	4	
Secondary School	682	9.2	63	90.8	619	0.0	0	$P=0.000$
High School	382	3.9	15	96.1	367	0.0	0	
University	92	0.0	0	98.9	91	1.1	1	
PPI Index(*)								
Poorest (0-24)	257	35.4	91	63.8	164	0.8	2	$x^2=130.66$ $df=6$
Poor (25-49)	942	19.3	182	80.5	758	0.2	2	
Medium (50-74)	960	9.7	93	90.2	866	0.1	1	$P=0.000$
High (75-100)	242	6.6	16	93.4	226	0.0	0	
Working Youth								
No	1901	15.6	296	84.2	1600	0.3	5	
Yes	500	17.2	86	82.8	414	0.0	0	
Landowner(*)								
No	300	21.3	64	78.3	235	0.3	1	$x^2=7.85$ $df=2, P=0.000$
Yes	2101	15.1	318	84.7	1779	0.2	4	
Occupation								
Farmer	1096	23.2	254	76.6	840	0.2	2	
Business person	390	13.8	54	85.9	335	0.3	1	
Sales and services	105	7.6	8	92.4	97	0.0	0	
Skilled Manual	96	8.3	8	90.6	87	1.0	1	
Housework/housewife	142	15.5	22	84.5	120	0.0	0	
Teacher	46	0.0	0	100.0	46	0.0	0	
University Student	44	0.0	0	97.7	43	2.3	1	
Non-university student	250	7.2	18	92.8	232	0.0	0	
Professional-technical-management	90	5.6	5	94.4	85	0.0	0	
Government official	93	2.2	2	97.8	91	0.0	0	
Forestry Worker	5	40.0	2	60.0	3	0.0	0	
Coastal fisherman/woman	35	25.7	9	74.3	26	0.0	0	
Freshwater fisherman/woman	35	20.0	7	80.0	28	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 18: Have you ever heard the term 'global warming'?
Base: All respondents

	Base	Global warming						
		No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2401	29.8	716	69.7	1674	0.5	11	
Sex(*)								
Male	1203	22.8	274	76.9	925	0.3	4	$x^2=58.73$ $df=2, P=0.000$
Female	1198	36.9	442	62.5	749	0.6	7	
Residence(*)								
Urban	820	21.5	176	77.9	639	0.6	5	$x^2=41.82$ $df=2, P=0.000$
Rural	1581	34.2	540	65.5	1035	0.4	6	
Region(*)								
Phnom Penh	200	11.5	23	88.5	177	0.0	0	$x^2=76.55$ $df=8$
Plain	676	26.0	176	73.1	494	0.9	6	
Tonle Sap	750	30.3	227	69.3	520	0.4	3	$P=0.000$
Coastal	300	29.7	89	70.0	210	0.3	1	
Mountain	475	42.3	201	57.5	273	0.2	1	
Ethnicity(*)								
Khmer	2254	28.5	642	71.0	1601	0.5	11	$x^2=55.87$ $x^2=55.87$ $df=4$ $df=4$ $P=0.000$ $P=0.000$
Indigenous people	89	65.2	58	34.8	31	0.0	0	
Cham	47	25.5	12	74.5	35	0.0	0	
Household Member(*)								
1-3	439	29.2	128	69.5	305	1.4	6	$x^2=10.97$ $df=4$ $P=0.027$
4-6	1404	29.3	411	70.4	989	0.3	4	
7-Over	558	31.7	177	68.1	380	0.2	1	
Age								
15-24	787	27.8	219	71.8	565	0.4	3	
25-34	712	28.7	204	70.6	503	0.7	5	
35-44	495	33.9	168	65.9	326	0.2	1	
45-55	407	30.7	125	68.8	280	0.5	2	
Education(*)								
No Schooling	257	53.7	138	45.9	118	0.4	1	$x^2=189.44$ $df=8$ $P=0.000$
Primary School	988	36.4	360	63.0	622	0.6	6	
Secondary School	682	24.0	164	75.5	515	0.4	3	
High School	382	14.1	54	85.9	328	0.0	0	
University	92	0.0	0	98.9	91	1.1	1	
PPI Index(*)								
Poorest (0-24)	257	54.5	140	45.1	116	0.4	1	$x^2=141.62$ $df=6$ $P=0.000$
Poor (25-49)	942	33.9	319	65.7	619	0.4	4	
Medium (50-74)	960	23.5	226	76.3	732	0.2	2	
High (75-100)	242	12.8	31	85.5	207	1.7	4	
Working Youth(*)								
No	1901	28.4	540	71.1	1352	0.5	9	$x^2=8.73$ $df=2, P=0.013$
Yes	500	35.2	176	64.4	322	0.4	2	
Landowner								
No	300	31.0	93	68.7	206	0.3	1	
Yes	2101	29.7	623	69.9	1468	0.5	10	
Occupation								
Farmer	1096	39.0	427	60.7	665	0.4	4	
Business person	390	31.3	122	67.7	264	1.0	4	
Sales and services	105	18.1	19	81.9	86	0.0	0	
Skilled Manual	96	13.5	13	84.4	81	2.1	2	
Housework/housewife	142	36.6	52	63.4	90	0.0	0	
Teacher	46	10.9	5	89.1	41	0.0	0	
University Student	44	2.3	1	97.7	43	0.0	0	
Non-university student	250	16.8	42	82.8	207	0.4	1	
Professional-technical-management	90	17.8	16	82.2	74	0.0	0	
Government official	93	6.5	6	93.5	87	0.0	0	
Forestry Worker	5	40.0	2	60.0	3	0.0	0	
<i>Coastal fisherman/woman</i>	35	42.9	15	57.1	20	0.0	0	
<i>Freshwater fisherman/woman</i>	35	25.7	9	74.3	26	0.0	0	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 19: Which term are you more familiar with?

Base: Those who have heard both terms 'climate change' and 'global warming'

	Base	Which term are you more familiar with?					
		Climate change		Global warming		Don't know	
		%	#	%	#	%	#
All Respondents	1579	72.6	1147	26.9	424	0.5	8
Sex							
Male	877	71.9	631	27.6	242	0.5	4
Female	702	73.5	516	25.9	182	0.6	4
Residence							
Urban	612	74.0	453	25.5	156	0.5	3
Rural	967	71.8	694	27.7	268	0.5	5
Region							
Phnom Penh	169	75.1	127	24.9	42	0.0	0
Plain	472	69.7	329	29.4	139	0.8	4
Tonle Sap	481	71.1	342	28.5	137	0.4	2
Coastal	198	76.3	151	23.7	47	0.0	0
Mountain	259	76.4	198	22.8	59	0.8	2
Ethnicity (*)							
Khmer	1517	72.9	1106	26.7	405	0.4	6
Indigenous people	26	61.5	16	34.6	9	3.8	1
Cham	31	67.7	21	29.0	9	3.2	1
Household Member							
1-3	284	78.2	222	21.8	62	0.0	0
4-6	934	71.5	668	27.8	260	0.6	6
7-Over	361	71.2	257	28.3	102	0.6	2
Age							
15-24	538	76.4	411	23.2	125	0.4	2
25-34	479	72.0	345	27.3	131	0.6	3
35-44	297	66.7	198	32.3	96	1.0	3
45-55	265	72.8	193	27.2	72	0.0	0
Education(*)							
No Schooling	107	60.7	65	39.3	42	0.0	0
Primary School	571	66.0	377	33.3	190	0.7	4
Secondary School	491	77.2	379	22.2	109	0.6	3
High School	320	79.4	254	20.3	65	0.3	1
University	90	80.0	72	20.0	18	0.0	0
PPI Index							
Poorest (0-24)	105	69.5	73	30.5	32	0.0	0
Poor (25-49)	567	70.2	398	29.3	166	0.5	3
Medium (50-74)	708	74.9	530	24.7	175	0.4	3
High (75-100)	199	73.4	146	25.6	51	1.0	2
Working Youth							
No	1273	72.1	918	27.3	347	0.6	8
Yes	306	74.8	229	25.2	77	0.0	0
Landowner							
No	191	72.8	139	26.2	50	1.0	2
Yes	1388	72.6	1008	26.9	374	0.4	6
Occupation							
Farmer	617	68.6	423	31.0	191	0.5	3
Business person	248	79.4	197	20.6	51	0.0	0
Sales and services	81	66.7	54	33.3	27	0.0	0
Skilled Manual	77	70.1	54	29.9	23	0.0	0
Housework/housewife	86	77.9	67	20.9	18	1.2	1
Teacher	41	73.2	30	26.8	11	0.0	0
University Student	42	83.3	35	16.7	7	0.0	0
Non-university student	197	77.7	153	21.3	42	1.0	2
Professional-technical-management	72	65.3	47	31.9	23	2.8	2
Government official	85	80.0	68	20.0	17	0.0	0
Forestry Worker	2	50.0	1	50.0	1	0.0	0
<i>Coastal fisherman/woman</i>	19	84.2	16	15.8	3	0.0	0
<i>Freshwater fisherman/woman</i>	23	52.2	12	47.8	11	0.0	0

$\chi^2=11.79$
df=4
P=0.019

$\chi^2=36.88$
df=8
P=0.000

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

**Table 20: For the term [climate change]: could you please tell me as much about it as you can?
Base: Those who have heard the term 'climate change' and chosen 'climate change' as the most familiar term**

	Sex					
	Male		Female		Total	
	%	#	%	#	%	#
Other Diseases	43.7	691	42.0	664	85.7	1355
Hotter/rise in temperature	34.0	538	32.0	506	66.0	1044
Deforestation locally	33.7	533	22.8	361	56.5	894
Decrease agricultural products	18.1	286	16.1	254	34.1	540
Drought	17.8	282	12.0	190	29.8	472
High technologies/ Buildings	12.8	203	15.0	238	27.9	441
Temperature change	8.2	130	15.8	250	24.0	380
Industry/Industrialisation	9.5	151	5.4	86	15.0	237
Plants do not grow	7.8	124	6.6	105	14.5	229
Storm	6.6	105	5.7	90	12.3	195
Rainfall less predictable	5.1	81	4.7	74	9.8	155
Colder/drop in temperature	4.6	73	5.1	80	9.7	153
Less rain	4.8	76	3.0	48	7.8	124
Flooding	4.5	71	2.8	44	7.3	115
Malaria	2.3	36	3.2	50	5.4	86
Cars	3.9	62	1.3	20	5.2	82
More rain	2.1	34	2.8	44	4.9	78
Climate change	2.2	35	1.1	18	3.4	53
Pollution	2.0	31	0.7	11	2.7	42
Deforestation globally	1.6	26	0.8	12	2.4	38
Dengue	0.6	10	1.6	26	2.3	36
Soil gets hotter	1.1	17	0.9	15	2.0	32
Oil/gas/coal	1.0	16	0.5	8	1.5	24
Natural causes	0.6	10	0.8	13	1.5	23
GHG/carbon emissions	0.7	11	0.4	6	1.1	17
(Disturbed) ecosystem/loss of biodiversity	0.6	9	0.4	7	1.0	16
Human activity	0.6	10	0.3	4	0.9	14
Energy consumption	0.4	7	0.3	4	0.7	11
Electricity	0.2	3	0.4	7	0.6	10
God	0.3	5	0.3	4	0.6	9
(Over-) population	0.4	6	0.2	3	0.6	9
(Skin) cancer/skin damage	0.1	2	0.4	6	0.5	8
Global warming	0.4	6	0.1	1	0.4	7
Construction	0.2	3	0.2	3	0.4	6
Weapons	0.3	5	0.1	1	0.4	6
Cutting down trees reduces rain	0.3	4	0.1	2	0.4	6
Greenhouse effect	0.2	3	0.1	2	0.3	5
Capitalism/commerce	0.2	3	0.0	0	0.2	3
Nuclear	0.1	1	0.1	2	0.2	3
Development	0.1	2	0.1	1	0.2	3
Greenhouse gas	0.2	3	0.0	0	0.2	3
Emissions	0.2	3	0.0	0	0.2	3
Coastal erosion	0.1	2	0.0	0	0.1	2
Excessive consumption	0.1	2	0.0	0	0.1	2
Gases	0.0	0	0.1	2	0.1	2
Sea level rise	0.1	1	0.0	0	0.1	1
Purify air	0.0	0	0.1	1	0.1	1
Others	1.7	27	2.0	31	3.7	58
Base	1582					

**Table 21: For the term [global warming]: could you please tell me as much about it as you can?
Base: Those who have heard the term 'global warming' and chosen 'global warming' as the most familiar term**

	Sex					
	Male		Female		Total	
	%	#	%	#	%	#
Hotter/rise in temperature	44.9	233	34.9	181	79.8	414
Other Diseases	48.9	254	37.8	196	86.7	450
Deforestation locally	35.3	183	18.1	94	53.4	277
Drought	15.0	78	18.1	94	33.1	172
Decrease agricultural products	17.5	91	12.5	65	30.1	156
High Technologies/ Buildings	13.9	72	16.0	83	29.9	155
Plants do not grow	8.5	44	7.7	40	16.2	84
Industry/Industrialisation	10.2	53	2.9	15	13.1	68
Stom	2.7	14	3.1	16	5.8	30
Less rain	3.5	18	2.1	11	5.6	29
Soil gets hotter	2.3	12	1.7	9	4.0	21
Colder/drop in temperature	1.9	10	2.1	11	4.0	21
Cars	2.3	12	1.7	9	4.0	21
Malaria	3.3	17	0.4	2	3.7	19
Rainfall less predictable	1.9	10	1.5	8	3.5	18
Flooding	2.3	12	1.0	5	3.3	17
Pollution	2.3	12	0.4	2	2.7	14
More rain	1.0	5	0.8	4	1.7	9
Dengue	1.5	8	0.2	1	1.7	9
Energy consumption	1.0	5	0.4	2	1.3	7
Climate change	1.0	5	0.4	2	1.3	7
Natural causes	0.6	3	0.6	3	1.2	6
Deforestation globally	0.8	4	0.4	2	1.2	6
Oil/gas/coal	1.2	6	0.0	0	1.2	6
GHG/carbon emissions	0.8	4	0.2	1	1.0	5
(Skin) cancer/skin damage	0.2	1	0.4	2	0.6	3
(Disturbed) ecosystem/loss of biodiversity	0.6	3	0.0	0	0.6	3
God	0.2	1	0.4	2	0.6	3
(Over-) population	0.6	3	0.0	0	0.6	3
Weapons	0.4	2	0.2	1	0.6	3
Global warming	0.2	1	0.4	2	0.6	3
Electricity	0.4	2	0.0	0	0.4	2
Human activity	0.4	2	0.0	0	0.4	2
Nuclear	0.4	2	0.0	0	0.4	2
Others	1.7	9	0.8	4	2.5	13
Base	519					

Table 22: Would you please tell me where you heard the term [climate change/global warming]?
Base: Those who have heard at least one of 'climate change' or 'global warming'

	Would you please tell me where you heard the term?																													
	Base	TV		Radio		Neighbour		Friend colleagues		Family member		School		News/magazine																
		%	#	%	#	%	#	%	#	%	#	%	#	%	#															
All Respondents	2109	62.1	1309	57.8	1219	49.7	1048	18.3	387	16.7	352	8.5	180	8.6	181															
Sex																														
Male	1101	65.9	726	64.1	706	45.5	501	24.2	266	17.3	191	8.1	89	10.4	115	$X^2=16.16$	$X^2=51.9$	$X^2=10.19$	$X^2=14.67$	$X^2=37.77$	$X^2=8.23$									
Female	1008	57.8	583	50.9	513	54.3	547	12.0	121	16.0	161	9.0	91	6.5	66	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.004$									
Residence																														
Urban	770	77.1	594	49.7	383	44.2	340	21.8	168	14.4	111	11.4	88	14.5	112	$X^2=14.87$	$X^2=4.51$	$X^2=9.74$	$X^2=5.97$	$X^2=20.40$	$X^2=117.07$	$X^2=32.30$	$X^2=13.01$							
Rural	1339	53.4	715	62.4	836	52.9	708	16.4	219	18.0	241	6.9	92	5.2	69	$df=1, p=0.000$	$df=1, p=0.034$	$df=1, p=0.002$	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.000$	$df=1, p=0.000$							
Region																														
Phnom Penh	196	86.7	170	55.1	108	44.9	88	21.4	42	18.4	36	7.7	15	21.4	42	$X^2=28.48$	$X^2=46.45$	$X^2=51.97$	$X^2=46.96$	$X^2=58.83$	$X^2=78.21$	$X^2=21.83$	$X^2=10.47$							
Plain	620	66.6	413	56.8	352	51.3	318	19.4	120	10.5	65	6.1	38	8.2	51	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.033$							
Tonle Sap	649	58.2	378	57.6	374	42.7	277	9.9	64	15.9	103	6.9	45	6.6	43															
Coastal	274	52.6	144	60.9	167	54.7	150	25.5	70	17.5	48	13.5	37	6.2	17															
Mountain	370	55.1	204	58.9	218	58.1	215	24.6	91	27.0	100	12.2	45	7.6	28															
Ethnicity (*)																														
Khmer	2008	0.6	1260	0.6	1151	0.5	996	0.2	374	0.2	334	0.1	176	0.1	175	$X^2=26.93$														
Indigenous people	52	0.3	15	0.6	32	0.6	31	0.2	8	0.2	11	0.1	4	0.0	0	$df=2$														
Cham	41	0.7	30	0.7	30	0.4	16	0.0	2	0.1	6	0.0	0	0.1	5	$p=0.000$														
Household Mmber(*)																														
1-3	390	0.6	219	0.6	230	0.5	208	0.2	72	0.2	67	0.1	26	0.1	30	$X^2=7.12$														
4-6	1236	0.6	785	0.6	699	0.5	606	0.2	213	0.2	201	0.1	106	0.1	108	$df=2$														
7-Over	483	0.6	305	0.6	290	0.5	234	0.2	102	0.2	84	0.1	48	0.1	43	$p=0.028$														
Age																														
15-24	709	64.7	459	61.1	433	45.8	325	24.7	175	18.1	128	22.8	162	11.6	82	$X^2=11.03$	$X^2=32.08$	$X^2=21.15$	$X^2=280.90$											
25-34	638	61.4	392	56.9	363	53.8	343	17.2	110	16.0	102	1.9	12	9.4	60	$df=3, p=0.012$	$df=3, p=0.000$	$df=3, p=0.000$	$df=3, p=0.000$											
35-44	417	60.2	251	53.2	222	52.5	219	13.7	57	16.8	70	1.0	4	6.0	25															
45-55	345	60.0	207	58.3	201	46.7	161	13.0	45	15.1	52	0.6	2	4.1	14															
Education																														
No Schooling	165	32.1	53	53.3	88	57.0	94	16.4	27	15.8	26	1.2	2	0.0	0	$X^2=41.23$	$X^2=63.01$	$X^2=169.82$	$X^2=143.23$	$X^2=176.92$										
Primary School	834	55.3	461	56.5	471	55.3	461	11.6	97	17.6	147	1.3	11	3.7	31	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$	$df=4, p=0.000$										
Secondary School	643	66.3	426	56.9	366	49.1	316	20.1	129	16.2	104	11.4	73	7.3	47															
High School	375	77.3	290	63.2	237	39.2	147	27.2	102	15.7	59	23.2	87	19.2	72															
University	92	85.9	79	62.0	57	32.6	30	34.8	32	17.4	16	7.6	7	33.7	31															
PPI Index																														
Poorest(0-24)	175	36.6	64	64.0	112	56.0	98	18.9	33	21.7	38	6.3	11	2.3	4	$X^2=11.54$	$X^2=9.95$	$X^2=10.34$	$X^2=60.88$	$X^2=32.72$	$X^2=137.39$	$X^2=9.50$	$X^2=18.85$							
Poor(25-49)	810	52.6	426	60.5	490	53.0	429	15.2	123	17.3	140	5.7	46	5.1	41	$df=3, p=0.009$	$df=3, p=0.019$	$df=3, p=0.016$	$df=3, p=0.000$	$df=3, p=0.000$	$df=3, p=0.000$	$df=3, p=0.023$	$df=3, p=0.000$							
Medium(50-74)	890	71.7	638	55.4	493	46.0	409	19.9	177	14.2	126	11.3	101	10.1	90															
High(75-100)	234	77.4	181	53.0	124	47.9	112	23.1	54	20.5	48	9.4	22	19.7	46															
Working Youth																														
No	1679	63.0	1058	56.6	950	48.8	819	18.2	306	16.6	278	8.7	146	2.3	39															
Yes	430	58.4	251	62.6	269	53.3	229	18.8	81	17.2	74	7.9	34	1.4	6	$X^2=5.28$	$df=1, p=0.022$	$X^2=5.01$	$df=1, p=0.025$											
Landowner																														
No	250	60.4	151	53.2	133	55.6	139	23.6	59	18.4	46	8.4	21	0.8	2	$X^2=3.96$	$df=1, p=0.047$	$X^2=5.22$	$df=1, p=0.022$											
Yes	1859	62.3	1158	58.4	1086	48.9	909	17.6	328	16.5	306	8.6	159	2.3	43															
Occupation																														
Farmer	888	49.1	436	62.5	555	53.7	477	56.0	497	16.3	145	2.1	19	2.3	20	$X^2=54.61$														
Business person	351	65.5	230	47.9	168	54.7	192	57.8	203	17.1	60	4.0	14	9.1	32	$df=12, p=0.000$														
Sales and services	102	76.5	78	56.9	58	48.0	49	52.9	54	14.7	15	1.0	1	13.7	14															
Skilled Manual	91	75.8	69	57.1	52	56.0	51	64.8	59	14.3	13	4.4	4	8.8	8	$X^2=147.18$														
Housework/housewife	124	75.8	94	42.7	53	53.2	66	55.6	69	16.1	20	1.6	2	6.5	8	$df=12, p=0.000$														
Teacher	46	78.3	36	67.4	31	39.1	18	58.7	27	8.7	4	4.3	2	21.7	10															
University Student	44	86.4	38	72.7	32	36.4	16	47.7	21	22.7	10	18.2	8	34.1	15	$X^2=54.04$														
Non-university student	242	73.1	177	56.2	136	33.5	81	55.0	133	18.6	45	50.0	121	19.0	46	$df=12, p=0.000$														
Professional-technical-management	87	63.2	55	47.1	41	41.4	36	56.3	49	19.5	17	3.4	3	16.1	14															
Government official	93	81.7	76	67.7	63	44.1	41	54.8	51	18.3	17	4.3	4	15.1	14															
Forestry Worker	4	0.0	0	75.0	3	75.0	3	100.0	4	25.0	1	0.0	0	0.0	0															
Coastal fisherman/woman	27	40.7	11	48.1	13	74.1	20	77.8	21	7.4	2	7.4	2	0.0	0															
Freshwater fisherman/woman	31	58.1	18	77.4	24	38.7	12	38.7	12	12.9	4	3.2	1	0.0	0															

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 23: What do you think causes the weather patterns to change in Cambodia? (Frequency Table)

Base: All respondents

Items	%	#
Deforestation in Cambodia	67.3	1616
Pollution by industry	17.6	423
Driving cars and other vehicles	10.9	262
Using fossil fuels	7.0	169
Nature	6.7	162
Fertilizer use	4.6	110
Human activities	4.5	108
Hole in the ozone layer	4.2	100
Waste	4.1	98
Forest fires	3.4	82
Burning wood	3.1	75
Deforestation/Tree-cutting in other countries	2.8	68
Using Air Conditioners	2.5	59
Greenhouse gas emissions	2.0	49
Burning rubbish	1.6	39
Growing population	1.4	33
Too much building	1.1	27
God	0.5	13
Punishment from God	0.2	6
Layer of Earth	0.2	4
Livestock	0.2	4
Natural gas	0.1	3
Don't know	29.1	698
Base		2401

Table 24: What do you think causes the weather patterns to change in Cambodia?
Base: All respondents

	What do you think causes the weather patterns to change in Cambodia?																			
	Base	Deforestation in Cambodia		Don't know		Pollution by industry		Driving cars and other vehicles		Using fossil fuels		Nature								
		%	#	%	#	%	#	%	#	%	#	%	#							
All Respondents	2401	67.3	1616	29.1	698	17.6	423	10.9	262	7.0	169	6.7	162							
Sex(*)														$X^2=118.89$	$X^2=92.03$	$X^2=48.58$	$X^2=55.14$	$X^2=45.60$		
Male	1203	77.7	935	20.2	243	23.0	277	15.6	188	10.6	127	6.7	81	df=1, P=0.000	df=1, P=0.000	df=1, P=0.000	df=1, P=0.000	df=1, P=0.000		
Female	1198	56.8	681	38.0	455	12.2	146	6.2	74	3.5	42	6.8	81							
Residence(*)														$X^2=12.21$	$X^2=14.64$	$X^2=72.80$	$X^2=54.57$	$X^2=22.64$		
Urban	820	72.0	590	24.1	198	26.8	220	17.4	143	10.5	86	6.0	49	df=1, P=0.000	df=1, P=0.000	df=1, P=0.000	df=1, P=0.000	df=1, P=0.000		
Rural	1581	64.9	1026	31.6	500	12.8	203	7.5	119	5.2	83	7.1	113							
Region(*)														$X^2=45.38$	$X^2=56.16$	$X^2=35.68$	$X^2=22.46$	$X^2=46.84$		
Phnom Penh	200	65.0	130	28.0	56	31.5	63	17.0	34	12.0	24	5.0	10	df=4	df=4	df=4	df=4	df=4		
Plain	676	64.1	433	29.3	198	18.6	126	12.0	81	8.4	57	6.4	43	P=0.000	P=0.000	P=0.000	P=0.000	P=0.000		
Tonle Sap	750	69.9	524	28.1	211	16.7	125	8.5	64	3.6	27	8.9	67							
Coastal	300	55.0	165	45.3	136	12.0	36	6.3	19	2.3	7	5.0	15							
Mountain	475	76.6	364	20.4	97	15.4	73	13.5	64	11.4	54	5.7	27							
Ethnicity(*)														$x^2=18.32$	$x^2=11.32$					
Khmer	2254	67.4	1519	28.8	649	18.4	414	11.5	259	7.3	165	6.8	154	df=2	df=2					
Indigenous people	89	65.2	58	29.2	26	1.1	1	2.2	2	1.1	1	4.5	4	P=0.000	P=0.000					
Cham	47	66.0	31	44.7	21	12.8	6	2.1	1	6.4	3	6.4	3							
Household Member																				
1-3	439	67.4	296	30.3	133	18.2	80	9.6	42	6.6	29	7.3	32							
4-6	1404	67.4	946	29.0	407	17.8	250	11.2	157	8.0	112	6.5	91							
7-Over	558	67.0	374	28.3	158	16.7	93	11.3	63	5.0	28	7.0	39							
Age(*)														$X^2=9.18$	$X^2=18.66$	$X^2=15.88$				
15-24	787	69.0	543	26.0	205	21.7	171	14.2	112	8.3	65	5.8	46	df=3	df=3	df=3				
25-34	712	66.0	470	28.9	206	18.0	128	10.7	76	6.7	48	7.0	50	P=0.027	P=0.000	P=0.001				
35-44	495	65.5	324	33.9	168	13.3	66	7.9	39	6.3	31	6.1	30							
45-55	407	68.6	279	29.2	119	14.3	58	8.6	35	6.1	25	8.8	36							
Education(*)														$X^2=130.82$	$X^2=155.52$	$X^2=315.30$	$X^2=227.76$	$X^2=89.12$		
No Schooling	257	54.5	140	43.2	111	3.9	10	3.5	9	2.3	6	7.0	18	df=4	df=4	df=4	df=4	df=4		
Primary School	988	58.7	580	38.0	375	7.8	77	4.1	41	3.4	34	7.1	70	P=0.000	P=0.000	P=0.000	P=0.000	P=0.000		
Secondary School	682	72.1	492	24.2	165	19.8	135	11.3	77	8.1	55	7.8	53							
High School	382	83.8	320	10.7	41	39.3	150	25.7	98	14.1	54	4.7	18							
University	92	91.3	84	6.5	6	55.4	51	40.2	37	21.7	20	3.3	3							
PPI Index(*)														$X^2=36.91$	$X^2=41.10$	$X^2=109.35$	$X^2=72.76$	$X^2=38.59$		
Poorest (0-24)	257	55.6	143	38.5	99	5.4	14	3.9	10	3.1	8	7.8	20	df=3	df=3	df=3	df=3	df=3		
Poor (25-49)	942	64.5	608	33.5	316	11.3	106	6.8	64	4.8	45	7.9	74	P=0.000	P=0.000	P=0.000	P=0.000	P=0.000		
Medium (50-74)	960	70.3	675	24.7	237	23.5	226	13.9	133	8.3	80	5.6	54							
High (75-100)	242	78.5	190	19.0	46	31.8	77	22.7	55	14.9	36	5.8	14							
Working Youth(*)														$X^2=5.82$	$X^2=5.22$	$X^2=9.27$				
No	1901	68.5	1302	28.0	532	18.8	358	11.5	218	7.3	139	6.9	132	df=1, P=0.016	df=1, P=0.022	df=1, P=0.002				
Yes	500	62.8	314	33.2	166	13.0	65	8.8	44	6.0	30	6.0	30							
Landowner(*)														$X^2=4.38$	$X^2=7.23$					
No	300	62.0	186	35.7	107	17.7	53	10.7	32	7.7	23	5.0	15	df=1, P=0.036	df=1, P=0.007					
Yes	2101	68.1	1430	28.1	591	17.6	370	10.9	230	6.9	146	7.0	147							
Occupation														$X^2=105.35$						
Farmer	1096	63.5	696	33.3	365	8.9	97	5.7	62	4.6	50	7.1	78	df=12, p=0.000						
Business person	390	67.4	263	29.7	116	19.0	74	10.8	42	5.9	23	7.2	28							
Sales and services	105	67.6	71	29.5	31	18.1	19	5.7	6	3.8	4	6.7	7	$X^2=103.74$						
Skilled Manual	96	63.5	61	32.3	31	27.1	26	9.4	9	8.3	8	5.2	5	df=12, p=0.000						
Housework/housewife	142	50.0	71	43.7	62	7.7	11	7.0	10	4.2	6	4.2	6							
Teacher	46	93.5	43	4.3	2	45.7	21	37.0	17	19.6	9	2.2	1							
University Student	44	88.6	39	2.3	1	52.3	23	36.4	16	20.5	9	9.1	4							
Non-university student	250	78.4	196	15.2	38	36.0	90	22.4	56	10.8	27	5.2	13							
Professional-technical-management	90	75.6	68	18.9	17	27.8	25	18.9	17	15.6	14	5.6	5							
Government official	93	88.2	82	17.2	16	37.6	35	26.9	25	19.4	18	8.6	8							
Forestry Worker	5	80.0	4	20.0	1	20.0	1	20.0	1	20.0	1	0.0	0							
Coastal fisherman/woman	35	48.6	17	57.1	20	0.0	0	0.0	0	0.0	0	2.9	1							
Freshwater fisherman/woman	35	37.1	13	42.9	15	2.9	1	2.9	1	0.0	0	17.1	6							

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in *bold italic* represent high negative relation between both variables

Table 25: To what extent do you agree or disagree with the statement? “Some people are saying that human activities are causing weather patterns around the world to change over time”

Base: All respondents

	Base	Mean	Some people are saying that human activities are causing weather patterns around the world to change over time					
			Disagree		Neutral		Agree	
			%	#	%	#	%	#
All Respondents	2401	2.50	21.4	513	7.1	171	71.5	1717
Sex								
Male	1203	2.60	17.6	212	5.0	60	77.4	931
Female	1198	2.40	25.1	301	9.3	111	65.6	786
Residence								
Urban	820	2.57	18.8	154	5.6	46	75.6	620
Rural	1581	2.47	22.7	359	7.9	125	69.4	1097
Region								
Phnom Penh	200	2.54	19.0	38	8.5	17	72.5	145
Plain	676	2.36	28.6	193	6.7	45	64.8	438
Tonle Sap	750	2.54	19.2	144	8.0	60	72.8	546
Coastal	300	2.58	18.7	56	4.7	14	76.7	230
Mountain	475	2.58	17.3	82	7.4	35	75.4	358
Ethnicity								
Khmer	2254	2.50	21.4	483	7.3	164	71.3	1607
Indigenous people	89	2.53	21.3	19	4.5	4	74.2	66
Cham	47	2.57	17.0	8	6.4	3	76.6	36
Household Member								
1-3	439	2.50	20.3	89	9.6	42	70.2	308
4-6	1404	2.48	22.6	317	6.5	91	70.9	996
7-Over	558	2.55	19.2	107	6.8	38	74.0	413
Age								
15-24	787	2.53	20.2	159	6.4	50	73.4	578
25-34	712	2.49	22.2	158	6.6	47	71.2	507
35-44	495	2.47	22.6	112	7.7	38	69.7	345
45-55	407	2.50	20.6	84	8.8	36	70.5	287
Education								
No Schooling	257	2.41	24.9	64	9.3	24	65.8	169
Primary School	988	2.37	26.9	266	8.8	87	64.3	635
Secondary School	682	2.55	19.6	134	5.6	38	74.8	510
High School	382	2.70	12.3	47	5.5	21	82.2	314
University	92	2.95	2.2	2	1.1	1	96.7	89
PPI Index								
Poorest (0-24)	257	2.55	17.9	46	9.3	24	72.8	187
Poor (25-49)	942	2.43	24.8	234	7.4	70	67.7	638
Medium (50-74)	960	2.53	20.0	192	6.8	65	73.2	703
High (75-100)	242	2.61	16.9	41	5.0	12	78.1	189
Working Youth								
No	1901	2.52	20.1	383	7.3	139	72.5	1379
Yes	500	2.42	26.0	130	6.4	32	67.6	338
Landowner								
No	300	2.48	24.3	73	3.0	9	72.7	218
Yes	2101	2.50	20.9	440	7.7	162	71.3	1499
Occupation								
Farmer	1096	2.42	24.6	270	8.7	95	66.7	731
Business person	390	2.42	25.1	98	7.7	30	67.2	262
Sales and services	105	2.55	19	20	6.7	7	74.3	78
Skilled Manual	96	2.52	20.8	20	6.2	6	72.9	70
Housework/housewife	142	2.44	26.1	37	4.2	6	69.7	99
Teacher	46	2.85	6.5	3	2.2	1	91.3	42
University Student	44	2.98	0	0	2.3	1	97.7	43
Non-university student	250	2.70	11.6	29	6.8	17	81.6	204
Professional-technical-management	90	2.58	20	18	2.2	2	77.8	70
Government official	93	2.76	9.7	9	4.3	4	86	80
Forestry Worker	5	3.00	0	0	0	0	100	5
<i>Coastal fisherman/woman</i>	35	2.60	17.1	6	5.7	2	77.1	27
<i>Freshwater fisherman/woman</i>	35	2.46	22.9	8	8.6	3	68.6	24

**Table 26: Do you think your actions contribute to causing climate change?
Base: All respondents**

	Base	Do you think your actions contribute to causing climate change?						
		No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2401	55.6	1335	33.2	797	11.2	269	
Sex(*)								
Male	1203	49.3	593	42.2	508	8.5	102	$X^2=92.50$ $df=2, P=0.000$
Female	1198	61.9	742	24.1	289	13.9	167	
Residence(*)								
Urban	820	50.7	416	39.9	327	9.4	77	$X^2=25.72$ $df=2, P=0.000$
Rural	1581	58.1	919	29.7	470	12.1	192	
Region(*)								
Phnom Penh	200	64.0	128	30.0	60	6.0	12	$X^2=77.73$ $df=8$ $P=0.000$
Plain	676	61.8	418	28.7	194	9.5	64	
Tonle Sap	750	44.7	335	38.5	289	16.8	126	
Coastal	300	65.0	195	26.3	79	8.7	26	
Mountain	475	54.5	259	36.8	175	8.6	41	
Ethnicity								
Khmer	2254	55.1	1243	33.6	758	11.2	253	
Indigenous people	89	61.8	55	27.0	24	11.2	10	
Cham	47	63.8	30	23.4	11	12.8	6	
Household Member								
1-3	439	55.4	243	32.3	142	12.3	54	
4-6	1404	55.1	774	33.3	468	11.5	162	
7-Over	558	57.0	318	33.5	187	9.5	53	
Age(*)								
15-24	787	53.2	419	38.9	306	7.9	62	$X^2=30.60$ $df=6, P=0.000$
25-34	712	57.2	407	32.0	228	10.8	77	
35-44	495	57.0	282	29.5	146	13.5	67	
45-55	407	55.8	227	28.7	117	15.5	63	
Education(*)								
No Schooling	257	62.3	160	19.5	50	18.3	47	$X^2=246.86$ $df=8$ $P=0.000$
Primary School	988	61.5	608	24.1	238	14.4	142	
Secondary School	682	56.7	387	33.6	229	9.7	66	
High School	382	42.9	164	53.7	205	3.4	13	
University	92	17.4	16	81.5	75	1.1	1	
PPI Index(*)								
Poorest (0-24)	257	58.8	151	26.1	67	15.2	39	$X^2=49.64$ $df=6$ $P=0.000$
Poor (25-49)	942	59.4	560	27.9	263	12.6	119	
Medium (50-74)	960	54.1	519	36.7	352	9.3	89	
High (75-100)	242	43.4	105	47.5	115	9.1	22	
Working Youth								
No	1901	54.5	1036	33.8	643	11.7	222	
Yes	500	59.8	299	30.8	154	9.4	47	
Landowner								
No	300	60.3	181	29.7	89	10.0	30	
Yes	2101	54.9	1154	33.7	708	11.4	239	
Occupation								
Farmer	1096	59.3	650	26.8	294	13.9	152	
Business person	390	56.9	222	32.1	125	11.0	43	
Sales and services	105	61.0	64	32.4	34	6.7	7	
Skilled Manual	96	58.3	56	30.2	29	11.5	11	
Housework/housewife	142	66.9	95	21.1	30	12.0	17	
Teacher	46	37.0	17	63.0	29	0.0	0	
University Student	44	31.8	14	65.9	29	2.3	1	
Non-university student	250	43.2	108	51.2	128	5.6	14	
Professional-technical-management	90	48.9	44	43.3	39	7.8	7	
Government official	93	40.9	38	51.6	48	7.5	7	
Forestry Worker	5	40.0	2	60.0	3	0.0	0	
<i>Coastal fisherman/woman</i>	35	71.4	25	14.3	5	14.3	5	
<i>Freshwater fisherman/woman</i>	35	45.7	16	28.6	10	25.7	9	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 27: How do your actions contribute to causing climate change?
Base: Those who said that their activities have contributed to causing climate change

	How do your actions contribute to causing climate change?															
	Base	Using Machine		Cutting the wood for cooking		Burning waste		Cooking		Using Chemical						
		%	#	%	#	%	#	%	#	%	#					
All Respondents	797	44.4	354	39.9	318	37.4	298	27.0	215	16.3	130					
Sex(*)																
Male	508	52.6	267	44.7	227	37.8	192	25.2	128	19.3	98	$X^2=37.62$	$X^2=13.37$	$X^2=9.11$		
Female	289	30.1	87	31.5	91	36.7	106	30.1	87	11.1	32	$df=1, P=0.000$	$df=1, P=0.000$	$df=1, P=0.003$		
Residence(*)																
Urban	327	58.1	190	22.9	75	41.0	134	27.8	91	10.4	34	$X^2=42.07$	$X^2=66.54$	$X^2=14.20$		
Rural	470	34.9	164	51.7	243	34.9	164	26.4	124	20.4	96	$df=1, P=0.000$	$df=1, P=0.000$	$df=1, P=0.000$		
Region(*)																
Phnom Penh	60	80.0	48	23.3	14	45.0	27	45.0	27	8.3	5	$X^2=71.32$	$X^2=45.75$	$X^2=25.40$	$X^2=32.64$	$X^2=25.38$
Plain	194	51.0	99	34.0	66	44.8	87	27.3	53	26.3	51	$df=4$	$df=4$	$df=4$	$df=4$	$df=4$
Tonle Sap	289	28.4	82	33.2	96	40.1	116	32.5	94	10.7	31	$P=0.000$	$P=0.000$	$P=0.000$	$P=0.000$	$P=0.000$
Coastal	79	39.2	31	64.6	51	38.0	30	8.9	7	21.5	17					
Mountain	175	53.7	94	52.0	91	21.7	38	19.4	34	14.9	26					
Ethnicity(*)																
Khmer	758	45.0	341	38.5	292	38.5	292	26.5	201	16.5	125	$x^2=11.16$	$x^2=9.04$			
Indigenous people	24	33.3	8	70.8	17	8.3	2	29.2	7	8.3	2	$df=2$	$df=2$			
Cham	11	18.2	2	54.5	6	36.4	4	45.5	5	18.2	2	$P=0.004$	$P=0.011$			
Household Member																
1-3	142	40.8	58	31.0	44	40.1	57	27.5	39	12.7	18					
4-6	468	45.1	211	41.9	196	37.4	175	27.8	130	18.4	86					
7-Over	187	45.5	85	41.7	78	35.3	66	24.6	46	13.9	26					
Age(*)																
15-24	306	45.8	140	38.6	118	43.8	134	19.3	59	15.4	47	$X^2=8.71$	$X^2=9.35$	$X^2=18.60$		
25-34	228	50.4	115	36.8	84	31.6	72	29.4	67	13.6	31	$df=3$	$df=3$	$df=3$		
35-44	146	39.0	57	46.6	68	35.6	52	37.7	55	17.1	25	$P=0.033$	$P=0.025$	$P=0.000$		
45-55	117	35.9	42	41.0	48	34.2	40	29.1	34	23.1	27					
Education(*)																
No Schooling	50	26.0	13	56.0	28	26.0	13	30.0	15	14.0	7	$X^2=88.71$	$X^2=24.94$	$X^2=26.15$		
Primary School	238	26.9	64	45.8	109	27.7	66	28.6	68	21.0	50	$df=4$	$df=4$	$df=4$		
Secondary School	229	42.4	97	43.2	99	40.6	93	28.8	66	14.4	33	$P=0.000$	$P=0.000$	$P=0.000$		
High School	205	59.5	122	31.7	65	49.3	101	22.4	46	16.1	33					
University	75	77.3	58	22.7	17	33.3	25	26.7	20	9.3	7					
PPI Index(*)																
Poorest (0-24)	67	13.4	9	70.1	47	20.9	14	17.9	12	10.4	7	$X^2=79.29$	$X^2=90.51$	$X^2=12.36$	$X^2=7.96$	
Poor (25-49)	263	31.6	83	54.4	143	34.6	91	25.9	68	19.8	52	$df=3$	$df=3$	$df=3$	$df=3$	
Medium (50-74)	352	52.0	183	31.8	112	42.3	149	29.0	102	17.0	60	$P=0.000$	$P=0.000$	$P=0.006$	$P=0.047$	
High (75-100)	115	68.7	79	13.9	16	38.3	44	28.7	33	9.6	11					
Working Youth(*)																
No	643	46.5	299	40.0	257	37.2	239	28.3	182	17.0	109	$X^2=5.85$				
Yes	154	35.7	55	39.6	61	38.3	59	21.4	33	13.6	21	$df=1, P=0.016$				
Landowner(*)																
No	89	44.9	40	28.1	25	39.3	35	29.2	26	12.4	11	$X^2=5.82$				
Yes	708	44.4	314	41.4	293	37.1	263	26.7	189	16.8	119	$df=1, P=0.016$				
Occupation																
Farmer	294	53.7	158	29.3	86	20.4	60	24.1	71	22.1	65	$X^2=54.799$				
Business person	125	28.0	35	38.4	48	6.4	8	35.2	44	10.4	13	$df=12$				
Sales and services	34	32.4	11	44.1	15	0.0	0	26.5	9	5.9	2	$P=0.000$ (Cutting the wood for cooking)				
Skilled Manual	29	27.6	8	48.3	14	10.3	3	37.9	11	13.8	4					
Housework/housewife	30	16.7	5	53.3	16	0.0	0	33.3	10	6.7	2	$X^2=33.584$				
Teacher	29	27.6	8	27.6	8	6.9	2	34.5	10	3.4	1	$df=12$				
University Student	29	27.6	8	31.0	9	3.4	1	13.8	4	17.2	5	$P=0.001$ (Burning waste)				
Non-university student	128	39.8	51	52.3	67	3.9	5	18.0	23	18.8	24					
Professional-technical-management	39	20.5	8	41.0	16	2.6	1	35.9	14	7.7	3					
Government official	48	37.5	18	37.5	18	10.4	5	35.4	17	20.8	10					
Forestry Worker	3	33.3	1	0.0	0	0.0	0	0.0	0	0.0	0					
Coastal fisherman/woman	5	60.0	3	20.0	1	0.0	0	40.0	2	0.0	0					
Freshwater fisherman/woman	10	70.0	7	10.0	1	10.0	1	30.0	3	0.0	0					

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 28: How do your actions contribute to causing climate change?

Base: Those who said that their activities have contributed to causing climate change

Items	%	#
Using Machine	44.4	354
Cutting the wood for cooking	39.9	318
Burning waste	37.4	298
Cooking	27.0	215
Using Chemical	16.3	130
Doing Agriculture	10.8	86
Careless dumping	7.9	63
Using fan/ Using Gas	6.0	48
Building big house/ using electricity too much	1.6	13
Poison substances used by people (cosmetic products)	0.5	4
Base		797

Table 29: Do you think climate change affects Cambodia now?
Base: Respondents who had heard the term 'climate change'

	Do you think climate change affects Cambodia now?						
	Base	No		Yes		Don't know	
		%	#	%	#	%	#
All Respondents	2014	0.9	19	98.2	1977	0.9	18
Sex							
Male	1053	0.9	9	98.3	1035	0.9	9
Female	961	1.0	10	98.0	942	0.9	9
Residence							
Urban	743	1.1	8	98.3	730	0.7	5
Rural	1271	0.9	11	98.1	1247	1.0	13
Region							
Phnom Penh	188	0.0	0	100.0	188	0.0	0
Plain	598	1.3	8	97.2	581	1.5	9
Tonle Sap	610	1.6	10	97.7	596	0.7	4
Coastal	262	0.4	1	99.6	261	0.0	0
Mountain	356	0.0	0	98.6	351	1.4	5
Ethnicity							
Khmer	1924	0.9	18	98.2	1889	0.9	17
Indigenous people	47	0.0	0	97.9	46	2.1	1
Cham	37	2.7	1	97.3	36	0.0	0
Household Member							
1-3	369	0.5	2	99.5	367	0.0	0
4-6	1181	1.3	15	97.7	1154	1.0	12
7-Over	464	0.4	2	98.3	456	1.3	6
Age							
15-24	682	0.9	6	98.2	670	0.9	6
25-34	614	0.8	5	98.2	603	1.0	6
35-44	388	1.5	6	97.7	379	0.8	3
45-55	330	0.6	2	98.5	325	0.9	3
Education							
No Schooling	154	0.0	0	98.7	152	1.3	2
Primary School	783	0.9	7	97.7	765	1.4	11
Secondary School	619	1.3	8	98.1	607	0.6	4
High School	367	0.8	3	98.9	363	0.3	1
University	91	1.1	1	98.9	90	0.0	0
PPI Index							
Poorest (0-24)	164	0.0	0	98.2	161	1.8	3
Poor (25-49)	758	1.2	9	97.9	742	0.9	7
Medium (50-74)	866	0.7	6	98.5	853	0.8	7
High (75-100)	226	1.8	4	97.8	221	0.4	1
Working Youth							
No	1600	0.9	15	98.3	1573	0.8	12
Yes	414	1.0	4	97.6	404	1.4	6
Landowner							
No	235	0.9	2	98.7	232	0.4	1
Yes	1779	1.0	17	98.1	1745	1.0	17
Occupation							
Farmer	840	1.0	8	97.7	821	1.3	11
Business person	335	1.2	4	97.3	326	1.5	5
Sales and services	97	1.0	1	97.9	95	1.0	1
Skilled Manual	87	0.0	0	100.0	87	0.0	0
Housework/housewife	120	0.8	1	99.2	119	0.0	0
Teacher	46	2.2	1	97.8	45	0.0	0
University Student	43	0.0	0	100.0	43	0.0	0
Non-university student	232	0.9	2	99.1	230	0.0	0
Professional-technical-management	85	1.2	1	97.6	83	1.2	1
Government official	91	1.1	1	98.9	90	0.0	0
Forestry Worker	3	0.0	0	100.0	3	0.0	0
<i>Coastal fisherman/woman</i>	26	0.0	0	100.0	26	0.0	0
<i>Freshwater fisherman/woman</i>	28	0.0	0	100.0	28	0.0	0

Table 30: Do you think climate change will affect Cambodia in the future?
Base: Respondents who had heard the term 'climate change'

	Do you think climate change will affect Cambodia in the future?							
	Base	No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2014	3.0	61	75.2	1514	21.8	439	
Sex								
Male	1053	2.7	28	75.7	797	21.7	228	
Female	961	3.4	33	74.6	717	22.0	211	
Residence(*)								$X^2=18.694$ $df=2, p=0.000$
Urban	743	3.6	27	79.7	592	16.7	124	
Rural	1271	2.7	34	72.5	922	24.8	315	
Region								
Phnom Penh	188	1.6	3	80.9	152	17.6	33	
Plain	598	2.8	17	73.1	437	24.1	144	
Tonle Sap	610	4.1	25	77.0	470	18.9	115	
Coastal	262	3.8	10	71.0	186	25.2	66	
Mountain	356	1.7	6	75.6	269	22.8	81	
Ethnicity								
Khmer	1924	3.0	57	75.4	1450	21.7	417	
Indigenous people	47	2.1	1	68.1	32	29.8	14	
Cham	37	8.1	3	70.3	26	21.6	8	
Household Member								
1-3	369	3.0	11	76.7	283	20.3	75	
4-6	1181	3.0	36	74.4	879	22.5	266	
7-Over	464	3.0	14	75.9	352	21.1	98	
Age(*)								$X^2=19.016$ $df=6$ $p=0.004$
15-24	682	3.7	25	79.5	542	16.9	115	
25-34	614	2.0	12	73.6	452	24.4	150	
35-44	388	2.8	11	74.0	287	23.2	90	
45-55	330	3.9	13	70.6	233	25.5	84	
Education(*)								$X^2=61.909$ $df=8$ $p=0.000$
No Schooling	154	6.5	10	64.3	99	29.2	45	
Primary School	783	3.1	24	69.7	546	27.2	213	
Secondary School	619	2.6	16	76.9	476	20.5	127	
High School	367	2.5	9	83.4	306	14.2	52	
University	91	2.2	2	95.6	87	2.2	2	
PPI Index(*)								$X^2=23.469$ $df=6$ $p=0.001$
Poorest (0-24)	164	1.2	2	72.6	119	26.2	43	
Poor (25-49)	758	3.4	26	71.0	538	25.6	194	
Medium (50-74)	866	3.3	29	76.9	666	19.7	171	
High (75-100)	226	1.8	4	84.5	191	13.7	31	
Working Youth								
No	1600	2.9	46	75.4	1207	21.7	347	
Yes	414	3.6	15	74.2	307	22.2	92	
Landowner								
No	235	3.0	7	78.3	184	18.7	44	
Yes	1779	3.0	54	74.8	1330	22.2	395	
Occupation								
Farmer	840	3.1	26	69.6	585	27.3	229	
Business person	335	1.8	6	74.0	248	24.2	81	
Sales and services	97	3.1	3	73.2	71	23.7	23	
Skilled Manual	87	2.3	2	79.3	69	18.4	16	
Housework/housewife	120	4.2	5	76.7	92	19.2	23	
Teacher	46	4.3	2	89.1	41	6.5	3	
University Student	43	0.0	0	97.7	42	2.3	1	
Non-university student	232	4.3	10	86.2	200	9.5	22	
Professional-technical-management	85	3.5	3	81.2	69	15.3	13	
Government official	91	2.2	2	78.0	71	19.8	18	
Forestry Worker	3	33.3	1	33.3	1	33.3	1	
<i>Coastal fisherman/woman</i>	26	0.0	0	50.0	13	50.0	13	
<i>Freshwater fisherman/woman</i>	28	3.6	1	78.6	22	17.9	5	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 31: What in your opinion are/will be the effects of climate change here in Cambodia? (Frequency Table)

Base: Respondents who thought that climate change affected Cambodia now or would affect Cambodia in the future

Items	%	#
Health	58.9	886
Harder to farm	47.3	712
Drought	36.3	546
Increasing temperature	34.8	524
Decreasing agricultural products	27.6	416
Water shortages	23.7	356
Less money	14.3	215
Harder to travel	13.6	205
Increasing natural disasters	13.4	201
Poverty	13.0	196
Irregular rainfall	11.4	171
Damage wildlife	10.4	157
Forest shortage	8.0	121
Damage housing	7.8	117
Increase in flood	6.2	94
Sickness and death of animals	4.6	69
Others	0.8	12
Base		1505

**Table 32: What in your opinion are the effects of climate change here in Cambodia?
Base: Respondents who thought that climate change affected Cambodia now or in the future**

	Base	Increasing natural disasters		Increasing temperature		Irregular rainfall		Decreasing agricultural products		Increase in flood		Drought		Health		Forest shortage		Poverty		Less money		Water shortages		Flooding		Harder to farm		Harder to travel		Damage housing		Damage wildlife		Economic Crisis		Sickness and Animals died		
		%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#			
All Respondents	1505	13.4	201	34.8	524	11.4	171	27.6	416	6.2	94	36.3	546	58.9	886	8.0	121	13.0	196	14.3	215	23.7	356	11.9	179	47.3	712	13.6	205	7.8	117	10.4	157	5.4	82	4.6	69	
Sex (*)																																						
Male	793	14.8	117	42.0	333	14.0	111	25.3	201	7.4	59	37.8	300	59.6	473	10.7	85	14.5	115	12.6	100	23.7	188	12.4	98	48.3	383	16.4	130	5.8	46	12.6	100	3.7	29	2.4	19	x2=38.02
Female	712	11.8	84	26.8	191	8.4	60	30.2	215	4.9	35	34.6	246	58.0	413	5.1	36	11.4	81	16.2	115	23.6	168	11.4	81	46.2	329	10.5	75	10.0	71	8.0	57	7.4	53	7.0	50	P=0.000,df=1
Residence (*)																																						
Urban	586	16.9	99	39.4	231	11.8	69	27.3	160	9.0	53	36.5	214	61.8	362	7.5	44	14.0	82	14.2	83	20.3	119	17.4	102	41.5	243	16.9	99	8.5	50	8.9	52	5.6	33	4.1	24	x2=10.38
Rural	919	11.1	102	31.9	293	11.1	102	27.9	256	4.5	41	36.1	332	57.0	524	8.4	77	12.4	114	14.4	132	25.8	237	8.4	77	51.0	469	11.5	106	7.3	67	11.4	105	5.3	49	4.9	45	P=0.001,df=1
Region (*)																																						
Phnom Penh	152	17.1	26	42.1	64	9.9	15	34.9	53	7.9	12	52.0	79	63.2	96	3.3	5	9.9	15	9.9	15	15.8	24	13.2	20	39.5	60	27.6	42	7.2	11	3.3	5	5.9	9	2.0	3	x2=25.74
Plain	431	15.3	66	37.8	163	11.6	50	30.6	132	3.7	16	28.8	124	61.3	264	3.5	15	10.7	46	12.3	53	14.2	61	3.2	14	40.1	173	12.3	53	3.9	17	7.4	32	7.0	30	4.6	20	df=4
Tonle Sap	467	12.8	60	36.6	171	12.6	59	23.6	110	5.8	27	35.3	165	56.5	264	8.6	40	20.3	95	9.4	44	25.7	120	10.3	48	46.5	217	6.0	28	8.8	41	10.3	48	4.9	23	4.1	19	P=0.000
Coastal	186	8.6	16	19.4	36	5.9	11	23.1	43	7.0	13	26.3	49	52.2	97	6.5	12	7.0	13	21.5	40	40.3	75	14.0	26	50.0	93	14.0	26	12.9	24	10.8	20	4.8	9	9.7	18	
Mountain	269	12.3	33	33.5	90	13.4	36	29.0	78	9.7	26	48.0	129	61.3	165	18.2	49	10.0	27	23.4	63	26.3	76	26.4	71	62.8	169	20.8	56	8.9	24	19.3	52	4.1	11	3.3	9	
Ethnicity (*)																																						
Khmer	1441	13.7	197	35.3	508	11.2	161	27.3	393	6.2	89	36.8	531	59.1	852	7.4	107	13.5	194	13.9	201	23.5	339	12.1	175	46.7	673	14.1	203	7.8	113	10.3	149	5.5	79	4.5	65	x2=6.61
Indigenous people	32	9.4	3	21.9	7	18.8	6	34.4	11	9.4	3	34.4	11	59.4	19	25.0	8	0.0	0	18.8	6	31.3	10	6.3	2	56.3	18	0.0	0	3.1	1	18.8	6	0.0	0	3.1	1	df=2
Cham	26	3.8	1	30.8	8	11.5	3	30.8	8	7.7	2	11.5	3	4.2	12	19.2	5	7.7	2	23.1	6	23.1	6	7.7	2	65.4	17	7.7	2	11.5	3	3.8	1	11.5	3	7.7	2	P=0.037
Household Member (*)																																						
1-3	281	11.0	31	37.7	106	14.2	40	25.6	72	3.6	10	33.1	93	61.6	173	8.2	23	15.7	44	14.2	40	22.8	64	9.3	26	47.3	133	11.7	33	6.8	19	10.7	30	7.5	21	2.8	8	x2=7.59
4-6	874	13.7	120	35.1	307	10.9	95	28.6	250	6.1	53	37.5	328	57.2	500	8.5	74	13.2	115	14.0	122	23.3	204	12.0	105	46.5	406	13.3	116	7.9	69	10.8	94	4.6	40	4.5	39	df=2
7-Over	350	14.3	50	31.7	111	10.3	36	26.9	94	8.9	31	35.7	125	60.9	213	6.9	24	10.6	37	15.1	53	25.1	88	13.7	48	49.4	173	16.0	56	8.3	29	9.4	33	6.0	21	6.3	22	P=0.022
Age (*)																																						
15-24	539	15.4	83	34.5	186	11.9	64	23.7	128	8.0	43	35.8	193	54.5	294	7.1	38	13.0	70	15.0	81	21.2	114	16.5	89	44.3	239	15.4	83	9.5	51	11.7	63	5.4	29	4.8	26	x2=9.04
25-34	449	11.1	50	32.7	147	11.1	50	27.6	124	5.1	23	37.2	167	56.6	254	8.9	40	15.1	68	16.0	72	26.9	121	9.8	44	51.4	231	13.8	62	6.9	31	10.0	45	5.3	24	3.3	15	df=3
35-44	284	15.1	43	38.4	109	10.9	31	30.3	86	5.6	16	36.3	103	62.7	178	8.8	25	10.6	30	13.7	39	22.9	65	12.0	34	46.8	133	15.1	43	7.4	21	9.5	27	4.2	12	6.7	19	P=0.029
45-55	233	10.7	25	35.2	82	11.2	26	33.5	78	5.2	12	35.6	83	68.7	160	7.7	18	12.0	28	9.9	23	24.0	56	5.2	12	46.8	109	7.3	17	6.0	14	9.4	22	7.3	17	3.9	9	
Education (*)																																						
No Schooling	99	5.1	5	33.3	33	9.1	9	26.3	26	4.0	4	34.3	34	63.6	63	15.2	15	7.1	7	16.2	16	26.3	26	8.1	8	50.5	50	9.1	9	5.1	5	14.1	14	1.0	1	8.1	8	x2=27.38
Primary School	544	11.2	61	32.7	178	9.7	53	26.8	146	3.5	19	34.2	186	56.6	308	7.4	40	12.7	69	14.0	76	25.4	138	8.1	44	49.8	271	9.0	49	7.9	43	8.8	47	5.5	30	4.4	24	df=4
Secondary School	472	12.5	59	34.3	162	10.2	48	27.8	131	6.8	32	37.1	175	59.3	280	7.2	34	12.3	58	12.3	58	23.1	109	11.9	56	46.2	218	14.2	67	7.6	36	12.7	60	5.3	25	6.8	32	P=0.000
High School	303	17.2	52	35.6	108	14.5	44	26.7	81	10.2	31	39.9	121	58.4	177	8.9	27	15.5	47	15.2	46	21.5	65	19.1	58	44.6	135	19.1	58	8.3	25	9.6	29	7.3	22	1.0	3	
University	87	27.6	24	49.4	43	19.5	17	36.8	32	9.2	8	34.5	30	66.7	58	5.7	5	17.2	15	21.8	19	20.7	18	14.9	13	43.7	38	25.3	22	9.2	8	8.0	7	4.6	4	2.3	2	
PPI Index (*)																																						
Poorest (0-24)	119	5.0	6	30.3	36	10.1	12	29.4	35	2.5	3	42.9	51	61.3	73	10.1	12	10.1	12	16.0	19	31.1	37	9.2	11	54.6	65	7.6	9	5.0	6	16.8	20	5.0	6	4.2	5	x2=14.80
Poor (25-49)	534	11.0	59	31.6	169	10.3	55	25.7	137	4.5	24	35.4	189	55.6	297	10.1	54	12.7	68	15.0	80	27.7	148	11.2	60	50.9	272	9.6	51	8.4	45	11.6	62	4.9	26	6.2	33	df=3
Medium (50-74)	664	16.3	108	35.8	238	12.0	80	28.2	187	7.1	47	35.2	234	59.0	392	6.0	40	13.3	88	13.1	87	20.6	137	11.6	77	45.8	304	15.5	103	8.0	53	8.6	57	6.0	40	3.9	26	P=0.002
High (75-100)	188	14.9	28	43.1	81	12.8	24	30.3	57	10.6	20	38.3	72	66.0	124	8.0	15	14.9	28	15.4	29	18.1	34	16.5	31	37.8	71											

Table 33: What consequences do the changes in weather have for the life of you and your family?
Base: All respondents

	Base	Nothing is difficult		Have a lot of diseases		Difficult to cultivate		Difficult to work		Difficult to travel		Reduction of agricultural products		Lack of water		More expense (electricity, water)		Heavy rain		Sickness		Hard to sleep	
		%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
All Respondents	2401	2.0	48	62.9	1510	50.9	1222	45.9	1102	33.9	814	32.7	786	13.3	320	12.1	291	3.3	79	2.4	57	3.1	74
Sex(*)																							
Male	1203	1.7	20	63.1	759	54.4	655	48.3	581	38.6	464	34.6	416	10.0	120	14.0	168	2.6	31	2.9	35	2.2	27
Female	1198	2.3	28	62.7	751	47.3	567	43.5	521	29.2	350	30.9	370	16.7	200	10.3	123	4.0	48	1.8	22	3.9	47
Residence(*)																							
Urban	820	2.9	24	63.4	520	30.0	246	48.4	397	44.4	364	19.1	157	9.6	79	18.4	151	5.0	41	1.7	14	4.4	36
Rural	1581	1.5	24	62.6	990	61.7	976	44.6	705	28.5	450	39.8	629	15.2	241	8.9	140	2.4	38	2.7	43	2.4	38
Region(*)																							
Phnom Penh	200	2.5	5	64.0	128	18.5	37	51.0	102	57.0	114	11.5	23	9.0	18	34.0	68	2.0	4	1.0	2	6.5	13
Plain	676	3.1	21	64.5	436	42.2	285	41.4	280	21.6	146	33.0	223	14.8	100	11.2	76	2.4	16	4.3	29	4.9	33
Tonle Sap	750	1.7	13	56.0	420	53.7	403	40.0	300	33.3	250	32.9	247	16.1	121	5.9	44	4.4	33	1.7	13	1.2	9
Coastal	300	1.0	3	67.3	202	61.7	185	41.7	125	41.7	125	29.0	87	16.3	49	13.3	40	3.0	9	1.7	5	3.3	10
Mountain	475	1.3	6	68.2	324	65.7	312	62.1	295	37.7	179	43.4	206	6.7	32	13.3	63	3.6	17	1.7	8	1.9	9
Ethnicity(*)																							
Khmer	2254	2.0	45	62.8	1416	49.9	1124	45.7	1030	34.8	784	32.0	721	13.4	302	12.6	285	3.4	77	2.5	57	3.2	73
Indigenous people	89	0.0	0	64.0	57	80.9	72	52.8	47	12.4	11	55.1	49	7.9	7	0.0	0	0.0	0	0.0	0	1.1	1
Cham	47	6.4	3	61.7	29	46.8	22	40.4	19	34.0	16	27.7	13	23.4	11	6.4	3	4.3	2	0.0	0	0.0	0
Household Member																							
1-3	439	2.7	12	64.9	285	46.7	205	46.0	202	31.7	139	28.7	126	13.9	61	12.1	53	3.2	14	3.2	14	3.0	13
4-6	1404	2.1	29	62.5	877	51.6	725	45.7	642	35.1	493	33.4	469	12.7	179	12.7	179	3.3	46	2.4	33	3.2	45
7-Over	558	1.3	7	62.4	348	52.3	292	46.2	258	32.6	182	34.2	191	14.3	80	10.6	59	3.4	19	1.8	10	2.9	16
Age(*)																							
15-24	787	2.4	19	57.7	454	47.1	371	48.5	382	38.2	301	28.8	227	13.3	105	13.5	106	4.4	35	1.4	11	3.3	26
25-34	712	1.7	12	63.8	454	53.5	381	49.2	350	32.2	229	29.6	211	12.2	87	12.2	87	2.7	19	2.2	16	2.4	17
35-44	495	1.8	9	66.1	327	53.5	265	42.0	208	31.1	154	37.4	185	14.9	74	11.3	56	3.8	19	2.8	14	3.8	19
45-55	407	2.0	8	67.6	275	50.4	205	39.8	162	31.9	130	40.0	163	13.3	54	10.3	42	1.5	6	3.9	16	2.9	12
Education(*)																							
No Schooling	257	0.8	2	66.9	172	65.0	167	48.6	125	24.1	62	42.4	109	8.9	23	5.8	15	1.2	3	2.7	7	2.7	7
Primary School	988	2.3	23	60.7	600	56.1	554	46.5	459	29.1	288	34.9	345	16.0	158	7.3	72	3.3	33	2.5	25	2.0	20
Secondary School	682	2.1	14	61.6	420	49.0	334	40.8	278	37.0	252	32.1	219	12.0	82	13.5	92	4.0	27	1.8	12	3.8	26
High School	382	2.1	8	64.7	247	37.4	143	49.0	187	44.2	169	24.3	93	12.6	48	22.0	84	3.9	15	2.9	11	4.7	18
University	92	1.1	1	77.2	71	26.1	24	57.6	53	46.7	43	21.7	20	9.8	9	30.4	28	1.1	1	2.2	2	3.3	3
PPI Index(*)																							
Poorest (0-24)	257	1.6	4	63.4	163	70.4	181	48.6	125	25.7	66	43.6	112	12.5	32	3.1	8	2.3	6	0.8	2	0.8	2
Poor (25-49)	942	1.5	14	60.4	569	61.1	576	46.4	437	29.2	275	37.7	355	14.3	135	7.9	74	3.4	32	3.2	30	2.3	22
Medium (50-74)	960	2.2	21	64.6	620	43.1	414	44.4	426	37.9	364	29.4	282	14.5	139	13.9	133	3.2	31	2.3	22	3.2	31
High (75-100)	242	3.7	9	65.3	158	21.1	51	47.1	114	45.0	109	15.3	37	5.8	14	31.4	76	4.1	10	1.2	3	7.9	19
Working Youth(*)																							
No	1901	1.9	36	64.4	1225	33.1	630	34.1	649	44.5	845	50.3	956	3.3	62	12.6	240	13.0	248	2.6	49	3.1	59
Yes	500	2.4	12	57.0	285	53.2	266	51.4	257	33.0	165	31.2	156	14.4	72	10.2	51	3.4	17	1.6	8	3.0	15
Landowner(*)																							
No	300	4.3	13	67.0	201	28.3	85	52.3	157	35.0	105	19.3	58	7.0	21	13.0	39	4.7	14	2.0	6	3.3	10
Yes	2101	1.7	35	62.3	1309	34.7	728	33.7	709	45.0	945	54.1	1137	3.1	65	12.0	252	14.2	299	2.4	51	3.0	64
Occupation																							
Farmer	1096	1.8	20	61.5	674	72.3	792	43.6	478	22.7	249	47.8	524	16.5	181	5.8	64	1.7	19	3.6	40	1.7	19
Business person	390	1.8	7	65.1	254	38.2	149	42.8	167	39	152	19	74	11.5	45	14.4	56	4.1	16	1.3	5	5.1	20
Sales and services	105	2.9	3	62.9	66	31.4	33	50.5	53	37.1	39	19	20	8.6	9	20	21	1	1	1.9	2	2.9	3
Skilled Manual	96	1	1	62.5	60	19.8	19	64.6	62	45.8	44	13.5	13	7.3	7	22.9	22	3.1	3	3.1	3	5.2	5
Housework/housewife	142	3.5	5	64.1	91	23.9	34	42.3	60	42.3	60	12.7	18	14.1	20	15.5	22	4.9	7	0	0	5.6	8
Teacher	46	0	0	82.6	38	30.4	14	56.5	26	39.1	18	15.2	7	6.5	3	13	6	4.3	2	2.2	1	4.3	2
University Student	44	2.3	1	68.2	30	29.5	13	52.3	23	43.2	19	20.5	9	11.4	5	27.3	12	2.3	1	2.3	1	4.5	2
Non-university student	250	2.4	6	57.6	144	38	95	42.4	106	48	120	26.4	66	11.2	28	18.4	46	6.8	17	0.8	2	3.6	9
Professional-technical-management	90	3.3	3	56.7	51	24.4	22	48.9	44	45.6	41	11.1	10	5.6	5	17.8	16	7.8	7	1.1	1	4.4	4
Government official	93	1.1	1	72	67	32.3	30	57	53	55.9	52	43	40	11.8	11	28	26	4.3	4	2.2	2	2.2	2
Forestry Worker	5	0	0	80	4	40	2	80	4	20	1	0	0	0	0	0	0	0	0	0	0	0	0
Coastal fisherman/woman	35	2.9	1	77.1	27	25.7	9	45.7	16	40	14	8.6	3	8.6	3	2.9	1	14.3	5	0	0	0	0
Freshwater fisherman/woman	35	0	0	80	28	48.6	17	54.3	19	40	14	11.4	4	14.3	5	0	0	5.7	2	0	0	0	

Table 34: To what extent has your work been affected by changes in the weather?
Base: All respondents

	To what extent has your work been affected by changes in the weather?									
	Base	Badly affected		Affected		Not affected		Don't know		
		%	#	%	#	%	#	%	#	
All Respondents	2401	58.2	1398	36.3	872	5.3	127	0.2	4	
Sex										
Male	1203	60.3	725	35.7	429	4.0	48	0.1	1	
Female	1198	56.2	673	37.0	443	6.6	79	0.3	3	
Residence										
Urban	820	42.3	347	48.4	397	9.0	74	0.2	2	
Rural	1581	66.5	1051	30.0	475	3.4	53	0.1	2	
Region										
Phnom Penh	200	40.0	80	48.0	96	11.5	23	0.5	1	
Plain	676	59.3	401	33.1	224	7.5	51	0.0	0	
Tonle Sap	750	60.1	451	35.2	264	4.3	32	0.4	3	
Coastal	300	52.7	158	46.3	139	1.0	3	0.0	0	
Mountain	475	64.8	308	31.4	149	3.8	18	0.0	0	
Ethnicity(*)										
Khmer	2254	57.5	1296	37.0	833	5.4	122	0.1	3	
Indigenous people	89	78.7	70	20.2	18	1.1	1	0.0	0	
Cham	47	59.6	28	31.9	15	6.4	3	2.1	1	
Household Member										
1-3	439	53.3	234	40.3	177	6.2	27	0.2	1	
4-6	1404	59.0	829	35.3	495	5.6	79	0.1	1	
7-Over	558	60.0	335	35.8	200	3.8	21	0.4	2	
Age										
15-24	787	51.8	408	44.2	348	3.7	29	0.3	2	
25-34	712	58.7	418	35.4	252	5.9	42	0.0	0	
35-44	495	65.1	322	29.5	146	5.3	26	0.2	1	
45-55	407	61.4	250	31.0	126	7.4	30	0.2	1	
Education										
No Schooling	257	72.8	187	22.6	58	3.9	10	0.8	2	
Primary School	988	66.0	652	30.3	299	3.6	36	0.1	1	
Secondary School	682	52.2	356	40.5	276	7.2	49	0.1	1	
High School	382	43.5	166	49.5	189	7.1	27	0.0	0	
University	92	40.2	37	54.3	50	5.4	5	0.0	0	
PPI Index										
Poorest (0-24)	257	72.8	187	26.1	67	0.8	2	0.4	1	
Poor (25-49)	942	66.6	627	29.9	282	3.4	32	0.1	1	
Medium (50-74)	960	52.8	507	40.1	385	6.9	66	0.2	2	
High (75-100)	242	31.8	77	57.0	138	11.2	27	0.0	0	
Working Youth										
No	1901	58.5	1112	35.6	677	5.7	109	0.2	3	
Yes	500	57.2	286	39.0	195	3.6	18	0.2	1	
Landowner										
No	300	50.7	152	40.0	120	9.0	27	0.3	1	
Yes	2101	59.3	1246	35.8	752	4.8	100	0.1	3	
Occupation										
Farmer	1096	74.0	811	24.3	266	1.6	17	0.2	2	
Business person	390	43.3	169	47.2	184	9.5	37	0.0	0	
Sales and services	105	54.3	57	36.2	38	9.5	10	0.0	0	
Skilled Manual	96	47.9	46	47.9	46	4.2	4	0.0	0	
Housework/housewife	142	46.5	66	40.1	57	12.7	18	0.7	1	
Teacher	46	30.4	14	60.9	28	8.7	4	0.0	0	
University Student	44	43.2	19	54.5	24	2.3	1	0.0	0	
Non-university student	250	42.8	107	52.4	131	4.4	11	0.4	1	
Professional-technical-management	90	37.8	34	46.7	42	15.6	14	0.0	0	
Government official	93	43.0	40	46.2	43	10.8	10	0.0	0	
Forestry Worker	5	60.0	3	20.0	1	20.0	1	0.0	0	
<i>Coastal fisherman/woman</i>	35	48.6	17	22.9	8	0.0	0	28.6	10	
<i>Freshwater fisherman/woman</i>	35	71.4	25	17.1	6	0.0	0	11.4	4	

$\chi^2=27.64$
 $df=6$
 $P=0.000$

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 35: To what extent do you agree that you are able to respond to the changing weather?
Base: All respondents

	Base	Mean	I am able to respond to the changing weather								
			Disagree		Neutral		Agree		Don't Know		
			%	#	%	#	%	#	%	#	
All Respondents	2401	1.74	59.2	1422	8.6	207	30.6	735	1.5	37	
Sex											
Male	1203	1.72	59.9	720	9.6	116	28.8	347	1.7	20	
Female	1198	1.77	58.6	702	7.6	91	32.4	388	1.4	17	
Residence(*)											
Urban	820	1.87	<i>51.5</i>	422	11.1	91	36.2	297	1.2	10	$X^2=35.14$
Rural	1581	1.68	63.3	1000	7.3	116	27.7	438	1.7	27	$df=3, P=0.000$
Region(*)											
Phnom Penh	200	1.70	64.5	129	2.5	5	32.0	64	1.0	2	$X^2=87.08$
Plain	676	1.64	63.9	432	9.8	66	24.6	166	1.8	12	$df=12$
Tonle Sap	750	1.91	<i>51.7</i>	388	7.6	57	39.1	293	1.6	12	$P=0.000$
Coastal	300	1.53	66.3	199	15.3	46	17.7	53	0.7	2	
Mountain	475	1.80	<i>57.7</i>	274	6.9	33	33.5	159	1.9	9	
Ethnicity											
Khmer	2254	1.70	58.9	1328	9.0	202	30.7	692	1.4	32	
Indigenous people	89	1.80	61.8	55	2.2	2	31.5	28	4.5	4	
Cham	47	1.60	68.1	32	6.4	3	23.4	11	2.1	1	
Household Member											
1-3	439	1.80	<i>57.9</i>	254	8.9	39	32.3	142	0.9	4	
4-6	1404	1.70	59.2	831	9.0	127	29.8	419	1.9	27	
7-Over	558	1.70	60.4	337	7.3	41	31.2	174	1.1	6	
Age											
15-24	787	1.81	<i>55.1</i>	434	9.8	77	33.5	264	1.5	12	
25-34	712	1.70	61.7	439	8.3	59	28.5	203	1.5	11	
35-44	495	1.73	60.8	301	8.1	40	28.7	142	2.4	12	
45-55	407	1.71	60.9	248	7.6	31	31.0	126	0.5	2	
Education(*)											
No Schooling	257	1.58	70.8	182	3.5	9	23.0	59	2.7	7	$X^2=48.78$
Primary School	988	1.73	60.5	598	7.4	73	30.3	299	1.8	18	$df=12$
Secondary School	682	1.73	<i>59.4</i>	405	9.5	65	30.1	205	1.0	7	$P=0.000$
High School	382	1.88	<i>50.5</i>	193	11.8	45	36.6	140	1.0	4	
University	92	1.89	<i>47.8</i>	44	16.3	15	34.8	32	1.1	1	
PPI Index(*)											
Poorest (0-24)	257	1.67	65.0	167	6.2	16	26.1	67	2.7	7	$X^2=18.25$
Poor (25-49)	942	1.70	61.7	581	7.5	71	29.4	277	1.4	13	$df=9$
Medium (50-74)	960	1.78	56.8	545	9.7	93	32.0	307	1.6	15	$P=0.032$
High (75-100)	242	1.83	<i>53.3</i>	129	11.2	27	34.7	84	0.8	2	
Working Youth											
No	1901	1.74	59.0	1121	9.2	175	30.3	576	1.5	29	
Yes	500	1.75	60.2	301	6.4	32	31.8	159	1.6	8	
Landowner											
No	300	1.77	59.7	179	5.0	15	34.0	102	1.3	4	
Yes	2101	1.74	59.2	1243	9.1	192	30.1	633	1.6	33	
Occupation											
Farmer	1096	1.68	63.7	698	6.8	74	27.5	301	2.1	23	
Business person	390	1.75	58.5	228	9.0	35	31.3	122	1.3	5	
Sales and services	105	1.74	60.0	63	6.7	7	32.4	34	1.0	1	
Skilled Manual	96	1.67	65.6	63	3.1	3	30.2	29	1.0	1	
Housework/housewife	142	1.69	60.6	86	11.3	16	26.8	38	1.4	2	
Teacher	46	1.83	52.2	24	13.0	6	34.8	16	0.0	0	
University Student	44	1.91	45.5	20	20.5	9	31.8	14	2.3	1	
Non-university student	250	1.92	<i>46.8</i>	117	15.2	38	36.8	92	1.2	3	
Professional-technical-management	90	1.94	48.9	44	8.9	8	41.1	37	1.1	1	
Government official	93	1.89	51.6	48	7.5	7	40.9	38	0.0	0	
Forestry Worker	5	1.80	60.0	3	0.0	0	40.0	2	0.0	0	
Coastal fisherman/woman	35	1.34	<i>77.1</i>	27	11.4	4	11.4	4	0.0	0	
Freshwater fisherman/woman	35	1.77	60.0	21	5.7	2	31.4	11	2.9	1	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 36: To what extent do you agree that your community can respond to the changing weather?

Base: All respondents

	Base	Mean	My community can respond to the changing weather								
			Disagree		Neutral		Agree		Don't know		
			%	#	%	#	%	#	%	#	
All Respondents	2401	1.99	49.4	1187	10.7	256	31.0	745	8.9	213	
Sex(*)											
Male	1203	1.90	51.0	614	13.1	157	30.3	365	5.6	67	$\chi^2=44.14$ $df=3, P=0.000$
Female	1198	2.08	47.8	573	8.3	99	31.7	380	12.2	146	
Residence											
Urban	820	2.05	47.4	389	10.2	84	32.6	267	9.8	80	
Rural	1581	1.97	50.5	798	10.9	172	30.2	478	8.4	133	
Region(*)											
Phnom Penh	200	1.96	58.0	116	<i>1.0</i>	2	28.5	57	12.5	25	$\chi^2=109.21$ $df=12$ $P=0.000$
Plain	676	1.92	54.7	370	9.8	66	24.1	163	11.4	77	
Tonle Sap	750	1.99	48.3	362	10.9	82	34.7	260	6.1	46	
Coastal	300	1.80	52.3	157	17.7	53	27.7	83	2.3	7	
Mountain	475	2.24	38.3	182	11.2	53	38.3	182	12.2	58	
Ethnicity(*)											
Khmer	2254	2.00	49.7	1120	10.9	246	30.8	694	8.6	194	$\chi^2=17.18$ $df=6$ $P=0.008$
Indigenous people	89	2.40	<i>37.1</i>	33	6.7	6	38.2	34	18.0	16	
Cham	47	1.70	61.7	29	8.5	4	25.5	12	4.3	2	
Household Member											
1-3	439	2.10	46.2	203	10.3	45	34.4	151	9.1	40	
4-6	1404	1.90	51.5	723	11.3	159	29.0	407	8.2	115	
7-Over	558	2.10	46.8	261	9.3	52	33.5	187	10.4	58	
Age(*)											
15-24	787	2.15	<i>41.9</i>	330	10.8	85	38.0	299	9.3	73	$\chi^2=36.15$ $df=9$ $P=0.000$
25-34	712	1.92	52.7	375	10.0	71	29.8	212	7.6	54	
35-44	495	1.91	53.7	266	10.7	53	<i>26.1</i>	129	9.5	47	
45-55	407	1.92	53.1	216	11.5	47	25.8	105	9.6	39	
Education(*)											
No Schooling	257	1.97	51.8	133	11.3	29	24.9	64	12.1	31	$\chi^2=24.53$ $df=12$ $P=0.017$
Primary School	988	1.97	50.9	503	10.7	106	28.6	283	9.7	96	
Secondary School	682	2.00	48.7	332	10.9	74	32.1	219	8.4	57	
High School	382	2.06	45.5	174	9.7	37	37.7	144	7.1	27	
University	92	1.93	48.9	45	10.9	10	38.0	35	2.2	2	
PPI Index											
Poorest (0-24)	257	2.09	44.7	115	12.5	32	31.5	81	11.3	29	
Poor (25-49)	942	1.99	48.8	460	11.1	105	31.7	299	8.3	78	
Medium (50-74)	960	1.96	51.3	492	10.0	96	29.9	287	8.9	85	
High (75-100)	242	2.00	49.6	120	9.5	23	32.2	78	8.7	21	
Working Youth(*)											
No	1901	1.96	50.7	963	11.0	210	<i>30.0</i>	571	8.3	157	$\chi^2=10.76$ $df=3, P=0.013$
Yes	500	2.12	<i>44.8</i>	224	9.2	46	34.8	174	11.2	56	
Landowner											
No	300	1.96	51.3	154	9.7	29	30.7	92	8.3	25	
Yes	2101	2.00	49.2	1033	10.8	227	31.1	653	8.9	188	
Occupation											
Farmer	1096	1.98	50.1	549	11.1	122	29.7	326	9.0	99	
Business person	390	1.97	51.0	199	10.8	42	28.5	111	9.7	38	
Sales and services	105	1.88	54.3	57	11.4	12	26.7	28	7.6	8	
Skilled Manual	96	1.96	55.2	53	6.2	6	26.0	25	12.5	12	
Housework/housewife	142	2.12	46.5	66	9.9	14	28.9	41	14.8	21	
Teacher	46	1.76	60.9	28	4.3	2	32.6	15	2.2	1	
University Student	44	1.82	50.0	22	18.2	8	31.8	14	0.0	0	
Non-university student	250	2.22	<i>36.0</i>	90	12.4	31	44.8	112	6.8	17	
Professional-technical-management	90	1.93	55.6	50	6.7	6	26.7	24	11.1	10	
Government official	93	2.05	47.3	44	6.5	6	39.8	37	6.5	6	
Forestry Worker	5	1.80	40.0	2	40.0	2	20.0	1	0.0	0	
<i>Coastal fisherman/woman</i>	35	1.71	62.9	22	11.4	4	17.1	6	8.6	3	
<i>Freshwater fisherman/woman</i>	35	1.63	62.9	22	11.4	4	25.7	9	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 37: The ability to access water
Base: All respondents

	The ability to access to water								
	Base	Worse		Neither better nor worse		Better		Don't Know	
		%	#	%	#	%	#	%	#
All Respondents	2401	23.2	556	29.7	712	47.0	1129	0.2	4
Sex									
Male	1203	26.1	314	27.4	330	46.3	557	0.2	2
Female	1198	20.2	242	31.9	382	47.7	572	0.2	2
Residence									
Urban	820	9.8	80	24.9	204	65.2	535	0.1	1
Rural	1581	30.1	476	32.1	508	37.6	594	0.2	3
Region									
Phnom Penh	200	11.0	22	20.0	40	69.0	138	0.0	0
Plain	676	15.2	103	28.4	192	56.2	380	0.1	1
Tonle Sap	750	29.5	221	36.4	273	33.9	254	0.3	2
Coastal	300	27.0	81	37.7	113	35.3	106	0.0	0
Mountain	475	27.2	129	19.8	94	52.8	251	0.2	1
Ethnicity									
Khmer	2254	22.8	513	30.1	678	47.0	1060	0.1	3
Indigenous people	89	34.8	31	16.9	15	47.2	42	1.1	1
Cham	47	25.5	12	34.0	16	40.4	19	0.0	0
Household Member									
1-3	439	23.0	101	31.9	140	45.1	198	0.0	0
4-6	1404	23.6	332	29.5	414	46.7	655	0.2	3
7-Over	558	22.0	123	28.3	158	49.5	276	0.2	1
Age									
15-24	787	19.6	154	29.4	231	50.7	399	0.4	3
25-34	712	25.1	179	29.6	211	45.2	322	0.0	0
35-44	495	25.1	124	30.7	152	44.2	219	0.0	0
45-55	407	24.3	99	29.0	118	46.4	189	0.2	1
Education									
No Schooling	257	37.7	97	25.3	65	36.2	93	0.8	2
Primary School	988	27.0	267	31.6	312	41.3	408	0.1	1
Secondary School	682	20.2	138	31.5	215	48.2	329	0.0	0
High School	382	13.4	51	25.1	96	61.3	234	0.3	1
University	92	3.3	3	26.1	24	70.7	65	0.0	0
PPI Index									
Poorest (0-24)	257	36.6	94	29.2	75	34.2	88	0.0	0
Poor (25-49)	942	31.8	300	30.4	286	37.6	354	0.2	2
Medium (50-74)	960	15.8	152	31.7	304	52.3	502	0.2	2
High (75-100)	242	4.1	10	19.4	47	76.4	185	0.0	0
Working Youth									
No	1901	23.0	438	29.2	556	47.7	906	0.1	1
Yes	500	23.6	118	31.2	156	44.6	223	0.6	3
Landowner									
No	300	23.3	70	24.3	73	51.3	154	1.0	3
Yes	2101	23.1	486	30.4	639	46.4	975	0.0	1
Occupation									
Farmer	1096	34.5	378	31.1	341	34.2	375	0.2	2
Business person	390	15.6	61	30.3	118	53.6	209	0.5	2
Sales and services	105	15.2	16	25.7	27	59.0	62	0.0	0
Skilled Manual	96	13.5	13	28.1	27	58.3	56	0.0	0
Housework/housewife	142	12.7	18	28.2	40	59.2	84	0.0	0
Teacher	46	6.5	3	26.1	12	67.4	31	0.0	0
University Student	44	4.5	2	22.7	10	72.7	32	0.0	0
Non-university student	250	13.6	34	27.2	68	59.2	148	0.0	0
Professional-technical-management	90	10.0	9	24.4	22	65.6	59	0.0	0
Government official	93	11.8	11	33.3	31	54.8	51	0.0	0
Forestry Worker	5	60.0	3	40.0	2	0.0	0	0.0	0
<i>Coastal fisherman/woman</i>	35	42.9	15	28.6	10	28.6	10	0.0	0
<i>Freshwater fisherman/woman</i>	35	8.6	3	22.9	8	68.6	24	0.0	0

Table 38: The quality of water
Base: All respondents

	The quality of water									
	Base	Worse		Neither better nor worse		Better		Don't Know		
		%	#	%	#	%	#	%	#	
All Respondents	2401	25.0	601	29.5	708	44.8	1075	0.7	17	
Sex(*)										
Male	1203	25.5	307	32.0	385	41.6	500	0.9	11	$\chi^2=12.40$ $\chi^2=87.03$ df=3, P=0.006 df=3, P=0.000
Female	1198	24.5	294	27.0	323	48.0	575	0.5	6	
Residence										
Urban	820	15.9	130	26.5	217	57.0	467	0.7	6	
Rural	1581	29.8	471	31.1	491	38.5	608	0.7	11	
Region										
Phnom Penh	200	14.5	29	20.5	41	64.5	129	0.5	1	
Plain	676	21.6	146	25.4	172	52.2	353	0.7	5	
Tonle Sap	750	31.5	236	34.5	259	32.9	247	1.1	8	
Coastal	300	22.3	67	36.7	110	40.7	122	0.3	1	
Mountain	475	25.9	123	26.5	126	47.2	224	0.4	2	
Ethnicity										
Khmer	2254	24.9	561	30.0	676	44.4	1001	0.7	16	
Indigenous people	89	30.3	27	19.1	17	49.4	44	1.1	1	
Cham	47	23.4	11	25.5	12	51.1	24	0.0	0	
Household Member										
1-3	439	23.5	103	29.8	131	46.5	204	0.2	1	
4-6	1404	26.1	367	28.3	398	44.7	627	0.9	12	
7-Over	558	23.5	131	32.1	179	43.7	244	0.7	4	
Age										
15-24	787	23.3	183	30.9	243	45.0	354	0.9	7	
25-34	712	27.2	194	27.8	198	44.1	314	0.8	6	
35-44	495	26.3	130	29.3	145	44.4	220	0.0	0	
45-55	407	23.1	94	30.0	122	45.9	187	1.0	4	
Education										
No Schooling	257	35.0	90	27.6	71	36.2	93	1.2	3	
Primary School	988	27.7	274	30.0	296	41.8	413	0.5	5	
Secondary School	682	24.0	164	30.5	208	44.3	302	1.2	8	
High School	382	16.2	62	28.0	107	55.8	213	0.0	0	
University	92	12.0	11	28.3	26	58.7	54	1.1	1	
PPI Index(*)										
Poorest (0-24)	257	37.0	95	30.0	77	33.1	85	0.0	0	$\chi^2=139.47$ df=9, P=0.000
Poor (25-49)	942	30.7	289	32.8	309	35.9	338	0.6	6	
Medium (50-74)	960	19.9	191	28.9	277	50.2	482	1.0	10	
High (75-100)	242	10.7	26	18.6	45	70.2	170	0.4	1	
Working Youth(*)										
No	1901	25.2	479	28.7	545	45.6	867	0.5	10	$\chi^2=7.87$ df=3, P=0.049
Yes	500	24.4	122	32.6	163	41.6	208	1.4	7	
Landowner										
No	300	29.3	88	26.3	79	43.3	130	1.0	3	
Yes	2101	29.3	88	26.3	79	43.3	130	1.0	3	
Occupation										
Farmer	1096	31.1	341	31.8	349	36.3	398	0.7	8	
Business person	390	22.3	87	24.4	95	52.6	205	0.8	3	
Sales and services	105	14.3	15	30.5	32	54.3	57	1.0	1	
Skilled Manual	96	20.8	20	30.2	29	47.9	46	1.0	1	
Housework/housewife	142	14.8	21	31.7	45	52.8	75	0.7	1	
Teacher	46	13.0	6	21.7	10	65.2	30	0.0	0	
University Student	44	13.6	6	22.7	10	63.6	28	0.0	0	
Non-university student	250	22.4	56	28.8	72	48.8	122	0.0	0	
Professional-technical-management	90	15.6	14	22.2	20	60.0	54	2.2	2	
Government official	93	17.2	16	34.4	32	47.3	44	1.1	1	
Forestry Worker	5	40.0	2	40.0	2	20.0	1	0.0	0	
<i>Coastal fisherman/woman</i>	35	31.4	11	25.7	9	42.9	15	0.0	0	
<i>Freshwater fisherman/woman</i>	35	48.6	17	31.4	11	20.0	7	0.0	0	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 39: Do people think they have sufficient water for work and personal use?
Base: All respondents

	Do people think they have sufficient water for work and personal use?				
	Base	No		Yes	
		%	#	%	#
All Respondents	2401	21.3	512	78.7	1889
Sex					
Male	1203	22.6	272	77.4	931
Female	1198	20.0	240	80.0	958
Residence					
Urban	820	11.2	92	88.8	728
Rural	1581	26.6	420	73.4	1161
Region					
Phnom Penh	200	13.5	27	86.5	173
Plain	676	14.3	97	85.7	579
Tonle Sap	750	24.1	181	75.9	569
Coastal	300	36.7	110	63.3	190
Mountain	475	20.4	97	79.6	378
Ethnicity					
Khmer	2254	21.3	479	78.7	1775
Indigenous people	89	22.5	20	77.5	69
Cham	47	27.7	13	72.3	34
Household Member					
1-3	439	20.3	89	79.7	350
4-6	1404	21.9	307	78.1	1097
7-Over	558	20.8	116	79.2	442
Age					
15-24	787	17.4	137	82.6	650
25-34	712	23.9	170	76.1	542
35-44	495	22.8	113	77.2	382
45-55	407	22.6	92	77.4	315
Education					
No Schooling	257	35.0	90	65.0	167
Primary School	988	23.7	234	76.3	754
Secondary School	682	20.4	139	79.6	543
High School	382	11.3	43	88.7	339
University	92	6.5	6	93.5	86
PPI Index					
Poorest (0-24)	257	33.1	85	66.9	172
Poor (25-49)	942	29.7	280	70.3	662
Medium (50-74)	960	13.9	133	86.1	827
High (75-100)	242	5.8	14	94.2	228
Working Youth					
No	1901	21.7	412	78.3	1489
Yes	500	20.0	100	80.0	400
Landowner					
No	300	22.3	67	77.7	233
Yes	2101	21.2	445	78.8	1656
Occupation					
Farmer	1096	28.8	316	71.2	780
Business person	390	15.4	60	84.6	330
Sales and services	105	16.2	17	83.8	88
Skilled Manual	96	19.8	19	80.2	77
Housework/housewife	142	17.6	25	82.4	117
Teacher	46	8.7	4	91.3	42
University Student	44	9.1	4	90.9	40
Non-university student	250	13.6	34	86.4	216
Professional-technical-management	90	6.7	6	93.3	84
Government official	93	15.1	14	84.9	79
Forestry Worker	5	80.0	4	20.0	1
<i>Coastal fisherman/woman</i>	35	48.6	17	51.4	18
<i>Freshwater fisherman/woman</i>	35	2.9	1	97.1	34

Table 40: Would you say you and your family have the water you need to do your work?
Base: All respondents

	Would you say you and your family have the water you need to do your work?							
	Base	No		Yes		Don't Know		
		%	#	%	#	%	#	
All Respondents	2396	66.8	1601	31.5	755	1.7	40	
Sex(*)								
Male	1202	65.1	782	33.9	407	1.1	13	$X^2=10.34$ $df=2, P=0.006$
Female	1194	68.6	819	29.1	348	2.3	27	
Residence(*)								
Urban	816	57.0	465	40.0	326	3.1	25	$X^2=60.29$ $df=2, P=0.000$
Rural	1580	71.9	1136	27.2	429	0.9	15	
Region(*)								
Phnom Penh	199	29.1	58	67.3	134	3.5	7	$X^2=191.05$ $df=8, P=0.000$
Plain	675	74.7	504	24.4	165	0.9	6	
Tonle Sap	747	65.3	488	33.9	253	0.8	6	
Coastal	300	65.0	195	34.3	103	0.7	2	
Mountain	475	74.9	356	21.1	100	4.0	19	
Ethnicity								
Khmer	2249	66.4	1494	31.9	718	1.6	37	
Indigenous people	89	85.4	76	12.4	11	2.2	2	
Cham	47	48.9	23	51.1	24	0.0	0	
Household Member								
1-3	438	66.0	289	33.1	145	0.9	4	
4-6	1400	68.0	952	30.2	423	1.8	25	
7-Over	558	64.5	360	33.5	187	2.0	11	
Age(*)								
15-24	785	63.3	497	34.9	274	1.8	14	$X^2=18.70$ $df=6, P=0.005$
25-34	711	65.1	463	33.2	236	1.7	12	
35-44	494	71.5	353	26.1	129	2.4	12	
45-55	406	70.9	288	28.6	116	0.5	2	
Education(*)								
No Schooling	257	79.4	204	19.1	49	1.6	4	$X^2=82.07$ $df=8, P=0.000$
Primary School	985	72.5	714	26.1	257	1.4	14	
Secondary School	681	62.3	424	35.1	239	2.6	18	
High School	381	56.4	215	43.0	164	0.5	2	
University	92	47.8	44	50.0	46	2.2	2	
PPI Index(*)								
Poorest (0-24)	257	80.2	206	19.8	51	0.0	0	$X^2=124.01$ $df=6, P=0.000$
Poor (25-49)	942	76.1	717	22.4	211	1.5	14	
Medium (50-74)	957	58.6	561	39.4	377	2.0	19	
High (75-100)	240	48.8	117	48.3	116	2.9	7	
Working Youth								
No	1896	66.6	1262	31.9	605	1.5	29	
Yes	500	67.8	339	30.0	150	2.2	11	
Landowner(*)								
No	300	61.3	184	35.3	106	3.3	10	$X^2=8.82$ $df=2, P=0.012$
Yes	2096	67.6	1417	31.0	649	1.4	30	
Occupation								
Farmer	1096	80.4	881	19.2	210	0.5	5	
Business person	388	53.9	209	41.8	162	4.4	17	
Sales and services	105	50.5	53	47.6	50	1.9	2	
Skilled Manual	96	50.0	48	47.9	46	2.1	2	
Housework/housewife	142	59.9	85	37.3	53	2.8	4	
Teacher	46	50.0	23	45.7	21	4.3	2	
University Student	43	48.8	21	51.2	22	0.0	0	
Non-university student	248	56.9	141	41.9	104	1.2	3	
Professional-technical-management	90	65.6	59	30.0	27	4.4	4	
Government official	93	62.4	58	37.6	35	0.0	0	
Forestry Worker	5	100.0	5	0.0	0	0.0	0	
<i>Coastal fisherman/woman</i>	35	71.4	25	28.6	10	0.0	0	
<i>Freshwater fisherman/woman</i>	35	25.7	9	71.4	25	2.9	1	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 41: Does climate change affect human health?

Base: Those who have heard the term 'climate change' and said that 'climate change' has affected or will affect Cambodia

	Does climate change effect on the health of human beings?				
	Base	No		Yes	
		%	#	%	#
All Respondents	1505	0.1	2	99.9	1503
Sex					
Male	793	0.1	1	99.9	792
Female	712	0.1	1	99.9	711
Residence					
Urban	586	0.2	1	99.8	585
Rural	919	0.1	1	99.9	918
Region					
Phnom Penh	152	0.0	0	100.0	152
Plain	431	0.2	1	99.8	430
Tonle Sap	467	0.2	1	99.8	466
Coastal	186	0.0	0	100.0	186
Mountain	269	0.0	0	100.0	269
Ethnicity					
Khmer	1441	0.1	2	99.9	1439
Indigenous people	32	0.0	0	100.0	32
Cham	26	0.0	0	100.0	26
Household Member					
1-3	281	0.4	1	99.6	280
4-6	874	0.1	1	99.9	873
7-Over	350	0.0	0	100.0	350
Age					
15-24	539	0.0	0	100.0	539
25-34	449	0.2	1	99.8	448
35-44	284	0.0	0	100.0	284
45-55	233	0.4	1	99.6	232
Education					
No Schooling	99	1.0	1	99.0	98
Primary School	544	0.0	0	100.0	544
Secondary School	472	0.2	1	99.8	471
High School	303	0.0	0	100.0	303
University	87	0.0	0	100.0	87
PPI Index					
Poorest (0-24)	119	0.0	0	100.0	119
Poor (25-49)	534	0.2	1	99.8	533
Medium (50-74)	664	0.0	0	100.0	664
High (75-100)	188	0.5	1	99.5	187
Working Youth					
No	1199	0.2	2	99.8	1197
Yes	306	0.0	0	100.0	306
Landowner					
No	184	0.5	1	99.5	183
Yes	1321	0.1	1	99.9	1320
Occupation					
Farmer	584	0.0	0	100.0	584
Business person	245	0.0	0	100.0	245
Sales and services	70	1.4	1	98.6	69
Skilled Manual	69	0.0	0	100.0	69
Housework/housewife	91	0.0	0	100.0	91
Teacher	41	0.0	0	100.0	41
University Student	42	0.0	0	100.0	42
Non-university student	198	0.0	0	100.0	198
Professional-technical-management	69	1.4	1	98.6	68
Government official	70	0.0	0	100.0	70
Forestry Worker	1	0.0	0	100.0	1
<i>Coastal fisherman/woman</i>	10	0.0	0	100.0	10
<i>Freshwater fisherman/woman</i>	18	0.0	0	100.0	18

Table 42: What are the effects on health? (Frequency Table)

Base: Those who have heard the term 'climate change', said that 'climate change' has affected or will affect Cambodia, and who said 'climate change' has affected human health

Items	%	#
High Fever	70.8	1063
Cold	65.0	975
Diarrhoea	59.4	891
Malaria	22.1	331
Dengue	18.0	270
Dizzy	11.3	170
Weakness	11.0	165
Cough	8.8	132
Intestine disease	8.1	122
Skill allergy	7.8	117
Coma	6.8	102
Skin disease or eyes	2.4	36
Hard to sleep	0.3	4
Others	3.4	51
Base		1501

Table 43: What can people do in response to the changing weather? (Frequency Table)
Base: All respondents

Items	%	#
Plant trees	21.4	514
Get air conditioning/ fan	14.6	351
Keep cool by bathing often or using a fan	14.3	344
New agricultural techniques	14.2	340
Irrigation canals	12.0	287
Other method	11.5	277
Water control structures	11.5	275
Nothing	8.0	192
Build dykes	7.9	189
Rehabilitate water storage structures	6.1	146
Plant as usual	6.0	144
Move away from one area to another	5.4	130
Lack of water for daily life	3.0	72
Increase feedstock for animals	1.0	24
Reduce water consumption	0.5	12
Don't know	25.7	616
Base		2401

Table 44: What can people do in response to the changing weather? (Part I)
Base: All respondents

	Base	Don't know		Planting the Trees		Get air conditioning/ fan		Often having a bath or using fan		Alternative agricultural techniques		Irrigation canals		
		%	#	%	#	%	#	%	#	%	#	%	#	
All Respondents	2401	25.7	616	21.4	514	14.6	351	14.3	344	14.2	340	12.0	287	
Sex(*)														
Male	1203	25.0	301	29.2	351	12.6	152	12.9	155	14.7	177	14.3	172	$\chi^2=10.36$
Female	1198	26.3	315	13.6	163	16.6	199	15.8	189	13.6	163	9.6	115	$df=1, P=0.001$ $\chi^2=12.58$ $df=1, P=0.000$ $\chi^2=7.60$ $df=1, P=0.006$ $\chi^2=6.50$ $df=1, P=0.011$
Residence(*)														
Urban	820	26.6	218	28.7	235	23.5	193	15.2	125	10.2	84	11.7	96	$\chi^2=6.99$ $\chi^2=79.34$ $\chi^2=8.59$
Rural	1581	25.2	398	17.6	279	10.0	158	13.9	219	16.2	256	12.1	191	$df=1, P=0.018$ $df=1, P=0.000$ $df=1, P=0.003$
Region(*)														
Phnom Penh	200	20.0	40	26.0	52	19.5	39	18.0	36	6.5	13	6.0	12	$\chi^2=13.2$ $\chi^2=11.95$ $\chi^2=59.15$ $\chi^2=106.67$ $\chi^2=340.71$
Plain	676	20.9	141	14.1	95	12.9	87	14.3	97	9.5	64	12.1	82	$df=4$ $df=4$ $df=4$ $df=4$ $df=4$
Tonle Sap	750	28.1	211	30.9	232	14.4	108	20.9	157	8.0	60	14.7	110	$P=0.010$ $P=0.018$ $P=0.000$ $P=0.000$ $P=0.000$
Coastal	300	32.7	98	14.3	43	13.7	41	10.0	30	8.3	25	10.3	31	
Mountain	475	26.5	126	19.4	92	16.0	76	5.1	24	37.5	178	10.9	52	
Ethnicity														
Khmer	2254	25.0	564	21.9	493	15.1	340	14.6	329	13.4	303	12.3	278	$\chi^2=6.61$ $\chi^2=9.14$ $\chi^2=11.50$ $\chi^2=61.92$ $\chi^2=14.69$
Indigenous people	89	39.3	35	6.7	6	2.2	2	4.5	4	31.5	28	3.4	3	$df=2, p=0.037$ $df=2, p=0.010$ $df=2, p=0.003$ $df=2, p=0.000$ $df=2, p=0.001$
Cham	47	27.7	13	31.9	15	17.0	8	21.3	10	8.5	4	10.6	5	
Household Member														
1-3	439	24.8	109	23.7	104	14.4	63	14.8	65	15.0	66	11.4	50	
4-6	1404	26.4	371	20.0	281	15.1	212	15.0	211	13.5	189	11.9	167	
7-Over	558	24.4	136	23.1	129	13.6	76	12.2	68	15.2	85	12.5	70	
Age(*)														
15-24	787	24.3	191	25.5	201	15.2	120	13.0	102	14.9	117	13.2	104	$\chi^2=15.14$ $\chi^2=11.98$ $\chi^2=10.83$
25-34	712	26.3	187	19.4	138	14.0	100	14.9	106	14.2	101	10.5	75	$df=3$ $df=3$ $df=4$
35-44	495	28.5	141	19.8	98	14.3	71	13.7	68	11.9	59	11.7	58	$P=0.002$ $P=0.007$ $P=0.028$
45-55	407	23.8	97	18.9	77	14.7	60	16.7	68	15.5	63	12.3	50	
Education(*)														
No Schooling	257	34.2	88	6.2	16	8.6	22	13.6	35	18.3	47	6.2	16	$\chi^2=14.18$ $\chi^2=18.68$ $\chi^2=39.74$
Primary School	988	28.9	286	14.7	145	11.2	111	15.0	148	13.9	137	10.7	106	$df=4$ $df=4$ $df=4$
Secondary School	682	25.5	174	24.3	166	16.7	114	13.2	90	13.3	91	13.2	90	$P=0.007$ $P=0.001$ $P=0.000$
High School	382	16.5	63	36.6	140	21.5	82	16.8	64	13.9	53	14.9	57	
University	92	5.4	5	51.1	47	23.9	22	7.6	7	13.0	12	19.6	18	
PPI Index(*)														
Poorest (0-24)	257	33.5	86	13.2	34	4.7	12	13.2	34	22.2	57	10.1	26	$\chi^2=8.20$ $\chi^2=78.73$ $\chi^2=8.79$ $\chi^2=46.73$
Poor (25-49)	942	26.4	249	19.0	179	11.0	104	13.8	130	15.8	149	11.0	104	$df=3$ $df=3$ $df=3$ $df=3$
Medium (50-74)	960	24.3	233	24.2	232	17.0	163	15.4	148	10.6	102	13.3	128	$P=0.042$ $P=0.000$ $P=0.032$ $P=0.000$
High (75-100)	242	19.8	48	28.5	69	29.8	72	13.2	32	13.2	32	12.0	29	
Working Youth(*)														
No	1901	25.1	477	22.5	428	15.4	292	14.8	282	13.5	256	12.4	236	$\chi^2=4.02$ $\chi^2=17.94$ $\chi^2=6.64$
Yes	500	27.8	139	17.2	86	11.8	59	12.4	62	16.8	84	10.2	51	$df=1, P=0.045$ $df=1, P=0.000$ $df=1, P=0.010$
Landowner(*)														
No	300	31.0	93	21.7	65	17.0	51	12.7	38	16.3	49	7.0	21	$\chi^2=7.99$ $\chi^2=4.84$ $\chi^2=5.13$
Yes	2101	24.9	523	21.4	449	14.3	300	14.6	306	13.9	291	12.7	266	$df=1, P=0.005$ $df=1, P=0.028$ $df=1, P=0.023$
Occupation														
Farmer	1096	26.6	292	14.9	163	7.9	87	14.6	160	11.6	127	11.8	129	$\chi^2=151.945$
Business person	390	25.4	99	19.7	77	23.3	91	12.3	48	9.7	38	10.0	39	$df=12$
Sales and services	105	21.0	22	26.7	28	19.0	20	14.3	15	7.6	8	10.5	11	$P=0.000$ (Planting)
Skilled Manual	96	24.0	23	21.9	21	18.8	18	16.7	16	10.4	10	6.2	6	
Housework/housewife	142	38.7	55	13.4	19	16.9	24	14.8	21	9.2	13	6.3	9	$\chi^2=48.68$
Teacher	46	17.4	8	45.7	21	13.0	6	13.0	6	28.3	13	13.0	6	$df=12$
University Student	44	2.3	1	45.5	20	34.1	15	11.4	5	25.0	11	20.5	9	$P=0.000$ (Don't Know)
Non-university student	250	20.4	51	39.6	99	19.2	48	14.0	35	11.6	29	18.4	46	
Professional-technical-management	90	34.4	31	30.0	27	22.2	20	12.2	11	12.2	11	13.3	12	
Government official	93	15.1	14	38.7	36	19.4	18	10.8	10	8.6	8	16.1	15	
Forestry Worker	5	60.0	3	0.0	0	0.0	0	0.0	0	40.0	2	0.0	0	
Coastal fisherman/woman	35	40.0	14	0.0	0	8.6	3	11.4	4	25.7	9	8.6	3	
Freshwater fisherman/woman	35	28.6	10	8.6	3	11.4	4	40.0	14	11.4	4	11.4	4	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in *bold italic* represent high negative relation between both variables

Table 45: What can people do in response to the changing weather? (Part II)
Base: All respondents

	Base	Other responding method		Water control structures		Nothing		Building dykes		Rehabilitating water storage structures		Planting as usual		
		%	#	%	#	%	#	%	#	%	#	%	#	
All Respondents	2401	11.5	277	11.5	275	8.0	192	7.9	189	6.1	146	6.0	144	
Sex(*)														
Male	1203	12.6	152	12.1	145	7.6	92	8.8	106	7.6	92	3.6	43	$\chi^2=25.10$
Female	1198	10.4	125	10.9	130	8.3	100	6.9	83	4.5	54	8.4	101	$\chi^2=86.50$ $\chi^2=4.08$ $df=1, P=0.000$ $df=1, P=0.000$ $df=1, P=0.043$
Residence(*)														
Urban	820	10.9	89	9.9	81	6.7	55	5.9	48	5.4	44	4.0	33	$\chi^2=38.91$
Rural	1581	11.9	188	12.3	194	8.7	137	8.9	141	6.5	102	7.0	111	$\chi^2=66.72$ $\chi^2=15.71$ $df=1, P=0.000$ $df=4, P=0.000$ $df=1, P=0.00$
Region(*)														
Phnom Penh	200	7.5	15	7.0	14	17.5	35	2.0	4	7.0	14	1.5	3	$\chi^2=74.78$
Plain	676	5.3	36	19.4	131	14.5	98	8.7	59	4.7	32	1.2	8	$\chi^2=64.66$ $\chi^2=266.08$ $\chi^2=21.84$ $df=4$ $df=4$ $df=4$ $df=4$
Tonle Sap	750	11.2	84	8.3	62	3.9	29	7.6	57	5.9	44	1.7	13	$P=0.000$ $P=0.000$ $P=0.000$ $P=0.000$
Coastal	300	19.7	59	9.7	29	7.3	22	8.0	24	9.7	29	2.0	6	
Mountain	475	17.5	83	8.2	39	1.7	8	9.5	45	5.7	27	24.0	114	
Ethnicity														
Khmer	2254	11.4	256	11.9	269	8.2	185	8.0	181	6.3	143	5.2	118	$\chi^2=8.98$
Indigenous people	89	14.6	13	2.2	2	5.6	5	5.6	5	3.4	3	24.7	22	$\chi^2=24.27$ $\chi^2=9.30$ $df=2, p=0.011$ $df=2, p=0.000$ $df=2, p=0.010$
Cham	47	14.9	7	6.4	3	4.3	2	4.3	2	0.0	0	0.0	0	
Household Member														
1-3	439	13.2	58	12.1	53	8.4	37	8.4	37	6.4	28	4.1	18	
4-6	1404	11.1	156	11.1	156	8.0	112	7.3	103	5.7	80	6.0	84	
7-Over	558	11.3	63	11.8	66	7.7	43	8.8	49	6.8	38	7.5	42	
Age(*)														
15-24	787	13.0	102	11.1	87	6.6	52	7.6	60	6.1	48	8.4	66	
25-34	712	11.8	84	10.7	76	9.7	69	7.0	50	5.3	38	6.0	43	
35-44	495	8.9	44	10.3	51	8.7	43	8.9	44	5.1	25	3.8	19	
45-55	407	11.5	47	15.0	61	6.9	28	8.6	35	8.6	35	3.9	16	
Education(*)														
No Schooling	257	12.1	31	8.2	21	6.2	16	8.2	21	5.1	13	14.4	37	$\chi^2=42.15$
Primary School	988	10.1	100	10.8	107	8.1	80	8.0	79	5.0	49	6.1	60	$\chi^2=166.21$ $\chi^2=52.09$ $df=4$ $df=4$ $df=4$
Secondary School	682	11.1	76	12.0	82	7.6	52	8.8	60	6.3	43	3.5	24	$P=0.000$ $P=0.000$ $P=0.000$
High School	382	13.4	51	13.1	50	7.9	30	6.5	25	7.3	28	5.5	21	
University	92	20.7	19	16.3	15	15.2	14	4.3	4	14.1	13	2.2	2	
PPI Index(*)														
Poorest (0-24)	257	15.2	39	8.9	23	5.1	13	7.8	20	7.0	18	14.4	37	$\chi^2=25.06$
Poor (25-49)	942	11.9	112	11.5	108	8.1	76	9.1	86	4.8	45	6.8	64	$\chi^2=8.53$ $\chi^2=25.76$ $\chi^2=13.77$ $df=3$ $df=3$ $df=3$ $df=3$
Medium (50-74)	960	9.6	92	12.2	117	8.6	83	7.0	67	6.3	60	3.2	31	$P=0.000$ $P=0.036$ $P=0.000$ $P=0.003$
High (75-100)	242	14.0	34	11.2	27	8.3	20	6.6	16	9.5	23	5.0	12	
Working Youth(*)														
No	1901	11.3	214	11.6	221	8.1	154	8.3	158	6.4	122	4.9	94	
Yes	500	12.6	63	10.8	54	7.6	38	6.2	31	4.8	24	10.0	50	
Landowner(*)														
No	300	9.7	29	7.7	23	6.7	20	6.0	18	5.7	17	7.3	22	
Yes	2101	11.8	248	12.0	252	8.2	172	8.1	171	6.1	129	5.8	122	
Occupation														
Farmer	1096	17.6	193	12.3	135	7.7	84	9.1	100	5.8	64	7.9	87	
Business person	390	11.3	44	11.3	44	9.2	36	5.9	23	4.6	18	4.9	19	
Sales and services	105	9.5	10	11.4	12	11.4	12	6.7	7	5.7	6	1.9	2	
Skilled Manual	96	8.3	8	9.4	9	16.7	16	5.2	5	2.1	2	2.1	2	
Housework/housewife	142	7.7	11	4.2	6	7.0	10	3.5	5	4.2	6	4.2	6	
Teacher	46	17.4	8	8.7	4	10.9	5	2.2	1	10.9	5	4.3	2	
University Student	44	11.4	5	9.1	4	13.6	6	6.8	3	11.4	5	2.3	1	
Non-university student	250	11.6	29	12.0	30	4.0	10	10.4	26	8.0	20	6.0	15	
Professional-technical-management	90	8.9	8	16.7	15	3.3	3	8.9	8	5.6	5	4.4	4	
Government official	93	20.4	19	11.8	11	8.6	8	9.7	9	11.8	11	6.5	6	
Forestry Worker	5	20.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
<i>Coastal fisherman/woman</i>	35	2.9	1	5.7	2	5.7	2	0.0	0	2.9	1	8.6	3	
<i>Freshwater fisherman/woman</i>	35	8.6	3	11.4	4	8.6	3	5.7	2	11.4	4	2.9	1	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 46: Have you or someone in your family done anything to respond to the changing weather?

Base: All respondents

	Base	Have you or someone in your family done anything to respond to the changing weather?				
		Yes		No		
		%	#	%	#	
All Respondents	2401	72.6	1743	27.4	658	
Sex (*)						
Male	1203	46.9	818	58.5	385	$X^2=25.622$ $df=1, P=0.000$
Female	1198	53.1	925	41.5	273	
Residence(*)						
Urban	820	76.2	625	23.8	195	$X^2=8.22$ $df=1, P=0.004$
Rural	1581	70.7	1118	29.3	463	
Region (*)						
Phnom Penh	200	75.5	151	24.5	49	$X^2=14.01$ $df=4$
Plain	676	73.5	497	26.5	179	
Tonle Sap	750	68.3	512	31.7	238	$P=0.007$
Coastal	300	71.7	215	28.3	85	
Mountain	475	77.5	368	22.5	107	
Ethnicity						
Khmer	2254	73.0	1645	27.0	609	
Indigenous people	89	65.2	58	34.8	31	
Cham	47	63.8	30	36.2	17	
Household Member						
1-3	439	70.6	310	29.4	129	
4-6	1404	72.9	1023	27.1	381	
7-Over	558	73.5	410	26.5	148	
Age(*)						
15-24	787	76.1	599	23.9	188	$X^2=9.02$ $df=3$
25-34	712	72.5	516	27.5	196	
35-44	495	70.1	347	29.9	148	$P=0.029$
45-55	407	69.0	281	31.0	126	
Education(*)						
No Schooling	257	63.0	162	37.0	95	$X^2=44.06$ $df=4$
Primary School	988	68.8	680	31.2	308	
Secondary School	682	74.8	510	25.2	172	$P=0.000$
High School	382	83.0	317	17.0	65	
University	92	80.4	74	19.6	18	
PPI Index(*)						
Poorest (0-24)	257	68.9	177	31.1	80	$X^2=30.38$ $df=3$
Poor (25-49)	942	68.0	641	32.0	301	
Medium (50-74)	960	75.2	722	24.8	238	$P=0.000$
High (75-100)	242	83.9	203	16.1	39	
Working Youth						
No	1901	72.2	1372	27.8	529	
Yes	500	74.2	371	25.8	129	
Landowner						
No	300	68.3	205	31.7	95	
Yes	2101	73.2	1538	26.8	563	
Occupation						
Farmer	1096	68.6	752	31.4	344	$X^2=34.72$ $df=12$
Business person	390	77.4	302	22.6	88	
Sales and services	105	69.5	73	30.5	32	$P=0.001$
Skilled Manual	96	65.6	63	34.4	33	
Housework/housewife	142	76.8	109	23.2	33	
Teacher	46	89.1	41	10.9	5	
University Student	44	84.1	37	15.9	7	
Non-university student	250	79.2	198	20.8	52	
Professional-technical-management	90	74.4	67	25.6	23	
Government official	93	75.3	70	24.7	23	
Forestry Worker	5	60.0	3	40.0	2	
<i>Coastal fisherman/woman</i>	35	62.9	22	37.1	13	
<i>Freshwater fisherman/woman</i>	35	71.4	25	28.6	10	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 47: What have you/they done in response? (Frequency Table)

Base: Those who have done something to respond to the changing weather and/or know someone who has done something to respond to the changing weather

Items	%	#
Got air conditioning/ fan	30.9	538
Bathed	21.5	374
Planted trees	21.0	366
Bought fan/ ice	10.6	185
Water control structures	10.3	179
Planted as usual	7.9	137
Moved away from one area to another	6.9	121
Planted more vegetation	6.9	120
Increased household's food stock	5.5	96
Built dykes	5.4	94
Changed/Diversified crops	4.4	76
Irrigation canals	4.3	75
Used hat/ cap/ stayed at home/ under trees	4.2	74
Arranged religious ceremonies	4.1	72
Talked to friends and neighbours	3.5	61
Rehabilitated water storage structures	3.0	53
Nothing	2.9	50
Prayed	2.0	34
Increased feed stock for animals	2.0	34
Prepared boats	1.7	29
Kept communities clean	1.5	27
Started fish farming	1.4	25
Strengthened dwelling against windstorms	1.1	20
Reduced water consumption	1.1	19
Used less energy	1.0	18
Built elevated enclosures for livestock	0.9	16
Paid more attention to weather forecasts	0.7	13
Other	1.1	19
Base		1743

Table 48: What have you/they done in response?
Base: Those who have done something to respond to the changing weather and/or know someone who has done something to respond to the changing weather

	Base	Other responding method		Get air conditioning/ fan		Planting the trees		Alternative Agricultural Technique		Water control structures		Planting as usual		Move away from one area to another		Building dykes		Irrigation canals			
		%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#		
All Respondents	1743	46.4	809	30.9	538	21.0	366	17.0	296	10.3	179	7.9	137	6.9	121	5.4	94	4.3	75		
Sex (*)																					
Male	818	44.7	366	28.9	236	31.7	259	19.9	163	10.3	84	5.5	45	4.9	40	6.5	53	5.9	48	X ² =9.673 X ² =8.169 X ² =10.047 X ² =11.842 X ² =28.309 X ² =105.671 X ² =9.479	
Female	925	47.9	443	32.6	302	11.6	107	14.4	133	10.3	95	9.9	92	8.8	81	4.4	41	2.9	27	df=1, P=0.002 df=1, P=0.002 df=1, P=0.002 df=1, P=0.001 df=1, P=0.000 df=1, P=0.000 df=1, P=0.002	
Residence(*)																					
Urban	625	48.5	303	55.5	347	24.5	153	8.0	50	6.7	42	3.8	24	5.4	34	2.7	17	3.0	19	X ² =4.15 X ² =21.74 X ² =13.64 X ² =7.12 X ² =13.32 X ² =55.76 X ² =277.53	
Rural	1118	45.3	506	17.1	191	19.1	213	22.0	246	12.3	137	10.1	113	7.8	87	6.9	77	5.0	56	df=1, P=0.042 df=1, P=0.000 df=1, P=0.000 df=1, P=0.008 df=1, P=0.000 df=1, P=0.000 df=1, P=0.000	
Region (*)																					
Phnom Penh	151	55.0	83	49.7	75	21.2	32	4.0	6	3.3	5	5.3	8	5.3	8	1.3	2	1.3	2	X ² =11.72 X ² =30.94 X ² =45.76 X ² =11.08 X ² =249.06	
Plain	497	46.7	232	27.0	134	15.5	77	12.5	62	16.1	80	1.8	9	7.0	35	7.0	35	5.4	27	df=4, P=0.020 df=4, P=0.000 df=4, P=0.000 df=4, P=0.026 df=4, P=0.000	
Tonle Sap	512	56.3	288	36.1	185	28.3	145	9.2	47	8.2	42	2.7	14	5.5	28	4.9	25	3.9	20	X ² =28.28 X ² =26.75 X ² =248.35 X ² =74.79	
Coastal	215	47.9	103	23.7	51	19.1	41	8.8	19	10.7	23	2.3	5	5.1	11	7.9	17	3.7	8	df=4, P=0.000 df=4, P=0.000 df=4, P=0.000 df=4, P=0.000	
Mountain	368	28.0	103	25.3	93	19.3	71	44.0	162	7.9	29	27.4	101	10.6	39	4.1	15	4.9	18		
Ethnicity (*)																					
Khmer	1645	46.8	770	32.0	527	21.5	353	15.6	257	10.6	175	6.5	107	7.0	115	5.5	90	4.3	71	X ² =28.67 X ² =70.38 X ² =22.69	
Indigenous people	58	24.1	14	0.0	0	8.6	5	56.9	33	1.7	1	46.6	27	8.6	5	5.2	3	5.2	3	df=2, p=0.000 df=2, p=0.000 df=2, p=0.000	
Cham	30	76.7	23	20.0	6	26.7	8	6.7	2	10.0	3	0.0	0	0.0	0	3.3	1	3.3	1		
Household Member																					
1-3	310	51.9	161	32.3	100	19.7	61	16.5	51	8.7	27	6.5	20	6.5	20	6.5	20	3.2	10		
4-6	1023	44.8	458	31.2	319	20.9	214	16.5	169	10.5	107	7.0	72	6.4	65	5.2	53	3.9	40		
7-Over	410	46.3	190	29.0	119	22.2	91	18.5	76	11.0	45	11.0	45	8.8	36	5.1	21	6.1	25		
Age(*)																					
15-24	599	43.2	259	30.2	181	26.0	156	17.9	107	10.4	62	9.3	56	6.7	40	5.3	32	4.3	26	X ² =11.62 X ² =14.97	
25-34	516	48.4	250	32.0	165	17.1	88	18.0	93	10.3	53	8.3	43	7.4	38	4.7	24	3.7	19	df=3 df=3	
35-44	347	48.7	169	32.0	111	19.3	67	14.4	50	9.2	32	7.2	25	5.8	20	4.9	17	4.3	15	P=0.009 P=0.002	
45-55	281	46.6	131	28.8	81	19.6	55	16.4	46	11.4	32	4.6	13	8.2	23	7.5	21	5.3	15		
Education (*)																					
No Schooling	162	43.2	70	15.4	25	8.6	14	30.2	49	6.2	10	21.0	34	11.1	18	5.6	9	3.7	6	X ² =12.08 X ² =102.61 X ² =17.35 X ² =82.02	
Primary School	680	51.5	350	23.2	158	15.7	107	17.6	120	9.4	64	8.7	59	9.0	61	5.4	37	3.4	23	df=4, P=0.017 df=4, P=0.000 df=4, P=0.002 df=4, P=0.000	
Secondary School	510	43.3	221	31.6	161	21.0	107	16.7	85	13.7	70	5.7	29	5.1	26	6.1	31	6.5	33	X ² =12.24 X ² =80.67 X ² =31.37 X ² =12.43	
High School	317	44.2	140	48.3	153	32.8	104	11.0	35	9.8	31	4.4	14	4.7	15	5.0	16	3.2	10	df=4, P=0.016 df=4, P=0.000 df=4, P=0.000 df=4, P=0.014	
University	74	37.8	28	55.4	41	45.9	34	9.5	7	5.4	4	1.4	1	1.4	1	1.4	1	4.1	3		
PPI Index(*)																					
Poorest (0-24)	177	41.2	73	8.5	15	15.3	27	33.9	60	6.2	11	19.8	35	10.2	18	4.0	7	5.6	10	X ² =8.09 X ² =9.58 X ² =269.38 X ² =19.26 X ² =56.03 X ² =11.21 X ² =61.69	
Poor (25-49)	641	48.8	313	15.1	97	19.0	122	20.3	130	12.6	81	9.4	60	9.7	62	6.9	44	4.7	30	df=3 df=3 df=3 df=3 df=3 df=3	
Medium (50-74)	722	47.2	341	40.2	290	24.7	178	12.0	87	10.1	73	3.5	25	4.4	32	5.4	39	4.2	30	P=0.044 P=0.022 P=0.000 P=0.000 P=0.000 P=0.000 P=0.011 P=0.000	
High (75-100)	203	40.4	82	67.0	136	19.2	39	9.4	19	6.9	14	8.4	17	4.4	9	2.0	4	2.5	5		
Working Youth(*)																					
No	1372	47.9	657	32.3	443	21.1	280	15.6	214	10.1	139	6.8	93	6.5	89	5.7	78	4.5	62	X ² =6.11 X ² =10.41 X ² =4.94 X ² =8.76 X ² =5.61	
Yes	371	41.0	152	25.6	95	20.5	76	22.1	82	10.8	40	11.9	44	8.6	32	4.3	16	3.5	13	df=1, P=0.013 df=1, P=0.001 df=1, P=0.026 df=1, P=0.003 df=1, P=0.018	
Landowner																					
No	205	47.8	98	35.1	72	18.0	37	16.6	34	7.8	16	6.3	13	5.9	12	4.9	10	2.4	5		
Yes	1538	46.2	711	30.3	466	21.4	329	17.0	262	10.6	163	8.1	124	7.1	109	5.5	84	4.6	70		
Occupation																					
Farmer	752	49.7	374	12.2	92	16.9	127	25.7	193	12.9	97	11.6	87	9.3	70	6.5	49	4.8	36		
Business person	302	47.4	143	49.3	149	14.6	44	10.6	32	8.3	25	6.6	20	4.3	13	3.3	10	2.3	7		
Sales and services	73	43.8	32	45.2	33	21.9	16	5.5	4	13.7	10	1.4	1	6.8	5	6.8	5	5.5	4		
Skilled Manual	63	54.0	34	44.4	28	22.2	14	3.2	2	9.5	6	0.0	0	6.3	4	3.2	2	1.6	1		
Housework/housewife	109	49.5	54	44.0	48	10.1	11	6.4	7	2.8	3	1.8	2	11.9	13	2.8	3	1.8	2		
Teacher	41	53.7	22	46.3	19	36.6	15	9.8	4	2.4	1	4.9	2	9.8	4	2.4	1	0.0	0		
University Student	37	43.2	16	56.8	21	35.1	13	8.1	3	5.4	2	2.7	1	2.7	1	2.7	1	5.4	2		
Non-university student	198	50.0	99	35.4	70	35.9	71	11.6	23	10.1	20	5.6	11	4.0	8	7.6	15	6.1	12		
Professional-technical-management	67	38.8	26	58.2	39	29.9	20	11.9	8	9.0	6	10.4	7	1.5	1	1.5	1	4.5	3		
Government official	70	38.6	27	47.1	33	48.6	34	20.0	14	8.6	6	7.1	5	2.9	2	7.1	5	8.6	6		
Forestry Worker	3	66.7	2	0.0	0	33.3	1	0.0	0	33.3	1	0.0	0	0.0	0	0.0	0	0.0	0		
Coastal fisherman/woman	22	58.1	13	13.6	3	0.0	0	9.1	2	4.5	1	18.2	4	0.0	0	0.0	0	0.0	0		
Freshwater fisherman/woman	25	56.0	14	24.0	6	0.0	0	28.0	7	4.0	1	8.0	2	0.0	0	8.0	2	8.0	2		

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

**Table 49: Have people in your community done anything in response to the changing weather?
Base: All respondents**

	Base	Have people in your community done anything in response to the changing weather?				
		Yes		No		
		%	#	%	#	
All Respondents	2401	55.2	1326	44.8	1075	
Sex						
Male	1203	55.4	667	44.6	536	
Female	1198	55.0	659	45.0	539	
Residence(*)						
Urban	820	51.7	424	48.3	396	$X^2=6.23$ $df=1, P=0.012$
Rural	1581	57.1	902	42.9	679	
Region(*)						
Phnom Penh	200	42.5	85	57.5	115	$X^2=92.95$ $df=4$ $P=0.000$
Plain	676	63.9	432	36.1	244	
Tonle Sap	750	44.0	330	56.0	420	
Coastal	300	55.7	167	44.3	133	
Mountain	475	65.7	312	34.3	163	
Ethnicity						
Khmer	2254	55.0	1239	45.0	1015	
Indigenous people	89	64.0	57	36.0	32	
Cham	47	46.8	22	53.2	25	
Household Member						
1-3	439	52.6	231	47.4	208	
4-6	1404	56.4	792	43.6	612	
7-Over	558	54.3	303	45.7	255	
Age						
15-24	787	55.9	440	44.1	347	
25-34	712	53.8	383	46.2	329	
35-44	495	57.0	282	43.0	213	
45-55	407	54.3	221	45.7	186	
Education						
No Schooling	257	55.6	143	44.4	114	
Primary School	988	52.3	517	47.7	471	
Secondary School	682	56.7	387	43.3	295	
High School	382	59.9	229	40.1	153	
University	92	54.3	50	45.7	42	
PPI Index						
Poorest (0-24)	257	51.0	131	49.0	126	
Poor (25-49)	942	57.3	540	42.7	402	
Medium (50-74)	960	53.5	514	46.5	446	
High (75-100)	242	58.3	141	41.7	101	
Working Youth						
No	1901	55.3	1051	44.7	850	
Yes	500	55.0	275	45.0	225	
Landowner						
No	300	53.7	161	46.3	139	
Yes	2101	55.4	1165	44.6	936	
Occupation						
Farmer	1096	57.1	626	42.9	470	
Business person	390	54.6	213	45.4	177	
Sales and services	105	54.3	57	45.7	48	
Skilled Manual	96	45.8	44	54.2	52	
Housework/housewife	142	50.7	72	49.3	70	
Teacher	46	56.5	26	43.5	20	
University Student	44	59.1	26	40.9	18	
Non-university student	250	56.8	142	43.2	108	
Professional-technical-management	90	45.6	41	54.4	49	
Government official	93	60.2	56	39.8	37	
Forestry Worker	5	40.0	2	60.0	3	
<i>Coastal fisherman/woman</i>	35	51.4	18	48.6	17	
<i>Freshwater fisherman/woman</i>	35	51.4	18	48.6	17	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 50: What are they doing?**Base: Know of someone in community who has responded to changing weather**

Items	%	#
Got air conditioning/ fan	25.3	336
Wearing hat/ umbrella/ dresses (long hand)	22.0	292
Planting trees	18.4	244
Water control structures	15.1	200
Planting more vegetation	8.9	118
Irrigation canals	8.6	114
Building dykes	7.2	95
Moving away from one area to another	7.1	94
Planting as usual	7.0	93
Arranging religious ceremonies	6.7	89
Changing/diversifying crops	6.0	79
Rehabilitating water storage structures	5.3	70
Increasing household's food stock	5.1	67
Talking to friends and neighbours	3.6	48
Buying other materials	3.0	40
Nothing	2.9	38
Keeping communities clean	2.1	28
Fish farming	1.7	22
Increasing feedstock for animals	1.7	22
Preparing boats	1.5	20
Strengthening dwelling against windstorms	1.1	14
Praying	1.1	14
Building elevated enclosures for livestock	1.0	13
Using less energy	0.8	10
Paying more attention to weather forecasts	0.5	6
Reducing water consumption	0.5	6
Bathing often	0.3	4
Other	0.8	10
Base		1326

Table 51: What are they doing?

Base: Those who have heard of people in their community who have done something to respond to the changing weather

	Base	Other responding method		Get air conditioning / fan		Alternative Agricultural Technique		Planting		Water control structures		Irrigation canals		Building dykes		Move away from one area to another		Planting as usual		
		%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	
All Respondents	1326	34.5	457	25.3	336	19.8	263	18.4	244	15.1	200	8.6	114	7.2	95	7.1	94	7.0	93	
Sex																				
Male	667	33.3	222	22.9	153	21.1	141	25.9	173	15.1	101	11.1	74	7.8	52	5.2	35	4.3	29	$\chi^2=10.65$, $df=1, P=0.001$
Female	659	35.7	235	27.8	183	18.5	122	10.8	71	15.0	99	6.1	40	6.5	43	9.0	59	9.7	64	$\chi^2=4.08$, $df=1, P=0.043$
Residence																				
Urban	424	41.5	176	50.5	214	10.8	46	22.2	94	8.7	37	6.8	29	4.2	18	5.9	25	2.1	9	$\chi^2=6.91$, $df=1, P=0.009$
Rural	902	31.2	281	13.5	122	24.1	217	16.6	150	18.1	163	9.4	85	8.5	77	7.6	69	9.3	84	$\chi^2=50.75$, $df=1, P=0.000$
Region																				
Phnom Penh	85	41.2	35	47.1	40	5.9	5	21.2	18	5.9	5	2.4	2	1.2	1	7.1	6	1.2	1	$\chi^2=4.10$, $df=1, P=0.043$
Plain	432	32.6	141	27.5	119	12.3	53	12.3	53	23.6	102	10.2	44	7.9	34	6.7	29	1.4	6	$\chi^2=14.62$, $df=1, P=0.001$
Tonle Sap	330	47.0	155	18.5	61	11.8	39	27.0	89	12.4	41	10.0	33	7.0	23	5.2	17	2.4	8	$\chi^2=7.98$, $df=1, P=0.005$
Coastal	167	32.9	55	30.5	51	9.0	15	18.6	31	14.4	24	9.6	16	16.6	16	5.4	9	1.2	2	$\chi^2=19.66$, $df=1, P=0.000$
Mountain	312	22.8	71	20.8	65	48.4	151	17.0	53	9.0	28	6.1	19	6.7	21	10.6	33	24.4	76	$\chi^2=208.10$, $df=1, P=0.000$
Ethnicity (*)																				
Khmer	1239	35.4	438	26.7	331	17.8	220	19.3	239	15.8	196	8.7	108	7.4	92	7.0	87	5.6	70	$\chi^2=22.86$, $df=1, P=0.000$
Indigenous people	57	14.0	8	0.0	0	64.9	37	5.3	3	1.8	1	3.5	2	5.3	3	10.5	6	35.1	20	$\chi^2=25.49$, $df=1, P=0.000$
Cham	22	45.5	10	9.1	2	4.5	1	9.1	2	13.6	3	18.2	4	0.0	0	0.0	0	0.0	0	$\chi^2=5.89$, $df=1, P=0.015$
Household Member (*)																				
1-3	231	38.5	89	26.0	60	16.0	37	18.6	43	13.9	32	8.2	19	9.1	21	6.5	15	5.2	12	$\chi^2=211.75$, $df=1, P=0.000$
4-6	792	34.6	274	25.4	201	19.9	158	18.2	144	16.2	128	8.2	65	6.8	54	6.4	51	6.3	50	$\chi^2=211.75$, $df=1, P=0.000$
7-Over	303	31.0	94	24.8	75	22.4	68	18.8	57	13.2	40	9.9	30	6.6	20	9.2	28	10.2	31	$\chi^2=44.28$, $df=1, P=0.000$
Age																				
15-24	440	33.2	146	25.7	113	20.2	89	22.3	98	14.1	62	8.9	39	6.4	28	5.7	25	9.8	43	$\chi^2=31.64$, $df=1, P=0.000$
25-34	383	36.0	138	27.2	104	20.9	80	15.1	58	14.9	57	7.8	30	6.8	26	8.6	33	7.0	27	$\chi^2=13.69$, $df=1, P=0.001$
35-44	282	32.6	92	24.1	68	18.8	53	18.1	51	14.5	41	9.2	26	9.9	28	6.4	18	5.7	16	$\chi^2=31.64$, $df=1, P=0.000$
45-55	221	36.7	81	23.1	51	18.6	41	16.7	37	18.1	40	8.6	19	5.9	13	8.1	18	3.2	7	$\chi^2=13.69$, $df=1, P=0.001$
Education																				
No Schooling	143	32.2	46	12.6	18	33.6	48	6.3	9	11.9	17	4.2	6	7.0	10	6.3	9	20.3	29	$\chi^2=36.86$, $df=1, P=0.000$
Primary School	517	34.8	180	19.5	101	21.1	109	13.5	70	14.9	77	9.9	51	7.5	39	9.1	47	7.2	37	$\chi^2=36.86$, $df=1, P=0.000$
Secondary School	387	33.1	128	25.8	100	20.4	79	20.4	79	19.1	74	8.5	33	8.5	33	5.9	23	4.9	19	$\chi^2=58.86$, $df=1, P=0.000$
High School	229	37.6	86	41.9	96	10.9	25	27.9	64	12.2	28	8.7	20	5.7	13	6.6	15	3.5	8	$\chi^2=36.86$, $df=1, P=0.000$
University	50	34.0	17	42.0	21	4.0	2	44.0	22	8.0	4	8.0	4	0.0	0	0.0	0	0.0	0	$\chi^2=58.86$, $df=1, P=0.000$
PPI Index																				
Poorest (0-24)	131	30.5	40	2.3	3	36.6	48	15.3	20	9.2	12	10.7	14	7.6	10	9.2	12	18.3	24	$\chi^2=9.49$, $df=1, P=0.002$
Poor (25-49)	540	32.6	176	14.1	76	24.3	131	15.6	84	17.8	96	9.4	51	8.5	46	9.4	51	8.0	43	$\chi^2=92.16$, $df=1, P=0.000$
Medium (50-74)	514	37.0	190	33.9	174	12.3	63	22.6	116	15.6	80	8.4	43	6.8	35	4.3	22	4.1	21	$\chi^2=49.35$, $df=1, P=0.000$
High (75-100)	141	36.2	51	58.9	83	14.9	21	17.0	24	8.5	12	4.3	6	2.8	4	6.4	9	3.5	5	$\chi^2=12.01$, $df=1, P=0.001$
Working Youth																				
No	1051	35.0	368	26.8	282	18.2	191	18.1	190	15.2	160	9.0	95	7.6	80	7.2	76	5.6	59	$\chi^2=58.86$, $df=1, P=0.000$
Yes	275	32.4	89	19.6	54	26.2	72	19.6	54	14.5	40	6.9	19	5.5	15	6.5	18	12.4	34	$\chi^2=8.79$, $df=1, P=0.003$
Landowner																				
No	161	38.5	62	29.8	48	25.5	41	19.3	31	9.3	15	4.3	7	5.6	9	5.6	9	6.8	11	$\chi^2=15.22$, $df=1, P=0.000$
Yes	1165	33.9	395	24.7	288	19.1	222	18.3	213	15.9	185	9.2	107	7.4	86	7.3	85	7.0	82	$\chi^2=8.79$, $df=1, P=0.003$
Occupation																				
Farmer	626	39.9	250	10.4	65	26.5	166	14.1	88	18.8	118	8.9	56	8.5	53	8.5	53	10.1	63	$\chi^2=4.21$, $df=1, P=0.039$
Business person	213	38.5	82	39.9	85	16.4	35	13.1	28	11.3	24	4.7	10	3.3	7	6.1	13	6.6	14	$\chi^2=4.75$, $df=1, P=0.029$
Sales and services	57	35.1	20	36.8	21	10.5	6	24.6	14	19.3	11	10.5	6	10.5	6	7.0	4	0.0	0	
Skilled Manual	44	43.2	19	50.0	22	6.8	3	22.7	10	9.1	4	2.3	1	4.5	2	4.5	2	0.0	0	
Housework/housewife	72	36.1	26	43.1	31	11.1	8	11.1	8	5.6	4	6.9	5	4.2	3	13.9	10	4.2	3	
Teacher	26	53.8	14	50.0	13	23.1	6	46.2	12	3.8	1	3.8	1	3.8	1	0.0	0	0.0	0	
University Student	26	42.3	11	50.0	13	0.0	0	30.8	8	7.7	2	11.5	3	3.8	1	0.0	0	3.8	1	
Non-university student	142	38.0	54	33.1	47	12.0	17	26.1	37	14.1	20	12.7	18	8.5	12	4.9	7	5.6	8	
Professional-technical-management	41	26.8	11	41.5	17	19.5	8	36.6	15	12.2	5	7.3	3	7.3	3	7.3	3	2.4	1	
Government official	56	37.5	21	32.1	18	17.9	10	42.9	24	10.7	6	12.5	7	8.9	5	3.6	2	5.4	3	
Forestry Worker	2	100.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
Coastal fisherman/woman	18	55.6	10	11.1	2	5.6	1	0.0	0	5.6	1	11.1	2	0.0	0	11.1	2	16.7	3	
Freshwater fisherman/woman	18	38.9	7	22.2	4	27.8	5	0.0	0	22.2	4	11.1	2	11.1	2	0.0	0	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 52: If weather changes were to get worse, how would you respond to the impact of these changes on your work? (Frequency Table)
Base: All respondents

Items	%	#
Don't know	25.7	617
Reforestation	18.8	452
Asking for donations	14.4	345
Water control structures	12.7	305
Get air conditioning/ fan	12.5	300
Move away from one area to another	8.2	197
Planting more vegetation	7.6	183
Nothing	6.9	166
Irrigation canals	6.8	164
Increasing household's foodstock	6.3	150
Building dykes	6.0	143
Rehabilitating water storage structures	5.4	129
Changing/Diversifying crops	5.2	124
Building elevated enclosures for livestock	3.9	93
Planting as usual	3.5	85
Fish farming	2.0	48
Praying	1.8	44
Preparing boats	1.4	34
Arranging religious ceremonies	1.3	32
Talking to friends and neighbours	1.3	32
Use less energy	1.3	30
Keeping communities clean	1.2	29
Increasing feedstock for animals	1.1	27
Moving to a safer place	1.1	26
Strengthening dwelling against windstorms	1.0	24
Paying more attention to weather forecasts	0.5	13
Reducing water consumption	0.5	11
Base		2401

**Table 53: What resources are needed to help people cope?
Base: All respondents**

Items	Top 3 resources identified							
	1 st		2 nd		3 rd		Cumulative	
	%	#	%	#	%	#	%	#
Money	25.4	609	9.4	226	5.5	132	13.4	967
Tools	18.1	435	21.0	504	8.8	212	16.0	1151
Support from government	11.7	280	9.7	232	4.1	99	8.5	611
Well/ stream/lake	8.6	207	3.1	74	1.1	26	4.3	307
Support from an NGO	7.3	175	8.9	213	4.4	106	6.9	494
Knowledge	5.4	130	6.4	153	3.8	91	5.2	374
Information	5.4	129	2.5	59	2.0	47	3.3	235
Fresh water/ Rain	3.9	93	1.8	44	0.5	11	2.1	148
Building materials	3.2	77	5.9	142	5.0	120	4.7	339
More people to help	2.9	70	4.0	95	4.5	108	3.8	273
Food/Rice/Tree	2.1	50	0.9	22	0.5	12	1.2	84
Education	1.9	45	1.7	42	2.5	60	2.0	147
Nothing	0.2	4	0.0	0	0.0	0	0.1	4
Cow/ Fish	0.1	3	0.1	2	0.0	0	0.1	5
Electricity	0.1	2	0.0	0	0.0	1	0.0	3
More time	0.0	0	0.2	4	0.2	5	0.1	9
Don't know	3.8	92	24.5	589	57.1	1371	28.5	2052

Table 54: What resources are needed to help people cope? (By gender)
Base: All respondents

Items Demands	1st		2nd		3rd	
	Gender		Gender		Gender	
	Male % #	Female % #	Male % #	Female % #	Male % #	Female % #
Money	23.9 287	26.9 322	10.8 102	14.3 124	12.3 71	13.4 61
Support from government	15.7 189	7.6 91	13.1 124	12.5 108	10.4 60	8.6 39
Support from an NGO	8.6 103	6.0 72	12.7 120	10.7 93	9.4 54	11.5 52
Tools	16.4 197	19.9 238	27.8 263	27.8 241	20.0 115	21.4 97
Building materials	2.7 33	3.7 44	7.6 72	8.1 70	12.3 71	10.8 49
More time	0.0 0	0.0 0	0.3 3	0.1 1	0.5 3	0.4 2
More people to help	3.2 39	2.6 31	5.1 48	5.4 47	8.5 49	13.0 59
Knowledge	5.5 66	5.3 64	9.8 93	6.9 60	11.1 64	5.9 27
Education	2.1 25	1.7 20	2.3 22	2.3 20	6.3 36	5.3 24
Information	6.6 79	4.2 50	4.4 42	2.0 17	6.1 35	2.6 12
Fresh water/ Rain	2.8 34	4.9 59	1.4 13	3.6 31	0.5 3	1.8 8
Food/Rice/Tree	1.3 16	2.8 34	1.0 9	1.5 13	0.7 4	1.8 8
Well/ stream/lake	7.5 90	9.8 117	3.6 34	4.6 40	1.9 11	3.3 15
Electricity	0.1 1	0.1 1	0.0 0	0.0 0	0.0 0	0.2 1
Do nothing	0.2 2	0.2 2	0.0 0	0.0 0	0.0 0	0.0 0
Cow/ Fish	0.0 0	0.3 3	0.1 1	0.1 1	0.0 0	0.0 0
Don't know	3.5 42	4.2 50	0.0 0	0.0 0	0.0 0	0.0 0

Table 55: What resources are needed to help people cope? (By residence)
Base: All respondents

Demand Items	1st				2nd				3rd			
	Residence				Residence				Residence			
	Urban		Rural		Urban		Rural		Urban		Rural	
	%	#	%	#	%	#	%	#	%	#	%	#
Money	21.3	175	27.5	434	10.7	62	13.3	164	12.8	45	12.8	87
Support from government	13.8	113	10.6	167	16.4	95	11.1	137	9.1	32	9.9	67
Support from an NGO	7.0	57	7.5	118	12.1	70	11.6	143	11.1	39	9.9	67
Tools	15.5	127	19.5	308	22.4	130	30.4	374	20.5	72	20.6	140
Building materials	3.5	29	3.0	48	6.6	38	8.4	104	9.1	32	13.0	88
More time	0.0	0	0.0	0	0.3	2	0.2	2	0.9	3	0.3	2
More people to help	2.9	24	2.9	46	6.0	35	4.9	60	10.3	36	10.6	72
Knowledge	8.2	67	4.0	63	10.9	63	7.3	90	10.8	38	7.8	53
Education	2.4	20	1.6	25	2.9	17	2.0	25	5.7	20	5.9	40
Information	7.9	65	4.0	64	5.0	29	2.4	30	6.6	23	3.5	24
Fresh water/ Rain	3.7	30	4.0	63	2.6	15	2.4	29	0.9	3	1.2	8
Food/Rice/Tree	2.0	16	2.2	34	1.6	9	1.1	13	0.6	2	1.5	10
Well/ stream/lake	5.2	43	10.4	164	2.6	15	4.8	59	1.7	6	2.9	20
Electricity	0.1	1	0.1	1	0.0	0	0.0	0	0.0	0	0.1	1
Do nothing	0.2	2	0.1	2	0.0	0	0.0	0	0.0	0	0.0	0
Cow/ Fish	0.0	0	0.2	3	0.0	0	0.2	2	0.0	0	0.0	0
Don't know	6.2	51	2.6	41	0.0	0	0.0	0	0.0	0	0.0	0

**Table 56: What resources are needed to help people cope? (By Progress out of Poverty Index)
Base: All respondents**

	1st				2nd				3rd															
	Poorest (0-24)		Poor (25-49)		Medium (50-74)		High (75-100)		Poorest (0-24)		Poor (25-49)		Medium (50-74)		High (75-100)									
	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#								
Money	35.8	92	27.8	262	22.1	212	17.8	43	16.0	41	13.5	99	10.4	72	8.0	14	12.6	16	14.7	59	10.4	40	14.7	17
Support from government	7.0	18	10.2	96	11.9	114	21.5	52	6.2	16	10.5	77	15.6	108	17.8	31	15.7	20	7.7	31	9.1	35	11.2	13
Support from an NGO	7.0	18	6.6	62	8.3	80	6.2	15	11.3	29	11.2	82	10.8	75	15.5	27	7.9	10	10.4	42	10.4	40	12.1	14
Tools	20.2	52	20.2	190	17.0	163	12.4	30	26.8	69	31.4	230	24.7	171	19.5	34	22.0	28	22.1	89	20.3	78	14.7	17
Building materials	5.1	13	3.1	29	2.7	26	3.7	9	6.6	17	8.3	61	7.7	53	6.3	11	13.4	17	12.9	52	11.4	44	6.0	7
More time	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.1	1	0.3	2	0.6	1	0.8	1	0.5	2	0.3	1	0.9	1
More people to help	2.3	6	3.1	29	2.4	23	5.0	12	3.9	10	5.5	40	4.8	33	6.9	12	15.7	20	7.5	30	11.4	44	12.1	14
Knowledge	1.9	5	3.9	37	6.9	66	9.1	22	4.3	11	6.5	48	10.8	75	10.9	19	3.9	5	6.5	26	10.9	42	15.5	18
Education	0.4	1	2.0	19	2.2	21	1.7	4	1.6	4	1.2	9	3.3	23	3.4	6	2.4	3	7.0	28	6.2	24	4.3	5
Information	2.7	7	3.4	32	6.9	66	9.9	24	1.2	3	2.2	16	4.5	31	5.2	9	0.8	1	4.7	19	4.7	18	7.8	9
Fresh water/ Rain	4.3	11	3.9	37	4.3	41	1.7	4	2.3	6	2.2	16	2.3	16	3.4	6	1.6	2	1.0	4	1.3	5	0.0	0
Food/Rice/Tree	3.1	8	2.0	19	2.2	21	0.8	2	0.0	0	1.5	11	1.3	9	1.1	2	1.6	2	1.5	6	1.0	4	0.0	0
Well/ stream/lake	7.0	18	10.8	102	8.2	79	3.3	8	2.7	7	5.9	43	3.2	22	1.1	2	1.6	2	3.5	14	2.3	9	0.9	1
Electricity	0.0	0	0.1	1	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.3	1	0.0	0
Do nothing	0.4	1	0.2	2	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Cow/ Fish	0.8	2	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.3	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0
Don't know	1.9	5	2.5	24	4.8	46	7.0	17	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0

Table 57: To what extent do you agree that changing weather brings benefits to you and your family?

Base: All respondents

	The changing weather brings benefits to me and my family									
	Base	Mean	Disagree		Neutral		Agree		Don't know	
			%	#	%	#	%	#	%	#
All Respondents	2401	1.20	89.0	2136	3.5	84	5.9	142	1.6	39
Sex										
Male	1203	1.22	88.4	1064	3.4	41	6.0	72	2.2	26
Female	1198	1.19	89.5	1072	3.6	43	5.8	70	1.1	13
Residence										
Urban	820	1.18	90.0	738	3.3	27	5.6	46	1.1	9
Rural	1581	1.21	88.4	1398	3.6	57	6.1	96	1.9	30
Region(*)										
Phnom Penh	200	1.17	91.0	182	2.0	4	6.0	12	1.0	2
Plain	676	1.18	89.8	607	3.7	25	5.2	35	1.3	9
Tonle Sap	750	1.33	82.9	622	3.9	29	10.1	76	3.1	23
Coastal	300	1.04	96.7	290	2.3	7	1.0	3	0.0	0
Mountain	475	1.14	91.6	435	4.0	19	3.4	16	1.1	5
Ethnicity										
Khmer	2254	1.20	88.9	2004	3.5	80	5.9	132	1.7	38
Indigenous people	89	1.20	89.9	80	3.4	3	6.7	6	0.0	0
Cham	47	1.20	89.4	42	2.1	1	6.4	3	2.1	1
Household Member										
1-3	439	1.20	87.9	386	4.8	21	6.4	28	0.9	4
4-6	1404	1.20	88.7	1246	3.6	51	5.6	78	2.1	29
7-Over	558	1.20	90.3	504	2.2	12	6.5	36	1.1	6
Age										
15-24	787	1.15	91.4	719	2.9	23	4.8	38	0.9	7
25-34	712	1.20	88.6	631	3.9	28	6.0	43	1.4	10
35-44	495	1.24	87.1	431	3.4	17	7.5	37	2.0	10
45-55	407	1.25	87.2	355	3.9	16	5.9	24	2.9	12
Education										
No Schooling	257	1.23	88.7	228	2.3	6	6.6	17	2.3	6
Primary School	988	1.25	86.6	856	4.4	43	6.8	67	2.2	22
Secondary School	682	1.18	89.9	613	3.8	26	5.0	34	1.3	9
High School	382	1.14	91.9	351	2.1	8	5.8	22	0.3	1
University	92	1.09	95.7	88	1.1	1	2.2	2	1.1	1
PPI Index										
Poorest (0-24)	257	1.18	91.1	234	2.3	6	4.7	12	1.9	5
Poor (25-49)	942	1.23	87.5	824	3.8	36	6.5	61	2.2	21
Medium (50-74)	960	1.18	90.0	864	2.9	28	5.7	55	1.4	13
High (75-100)	242	1.17	88.4	214	5.8	14	5.8	14	0.0	0
Working Youth										
No	1901	1.21	88.4	1681	3.6	69	6.0	115	1.9	36
Yes	500	1.16	91.0	455	3.0	15	5.4	27	0.6	3
Landowner										
No	300	1.19	89.0	267	4.7	14	4.7	14	1.7	5
Yes	2101	1.20	89.0	1869	3.3	70	6.1	128	1.6	34
Occupation										
Farmer	1096	1.24	87.2	956	3.8	42	6.5	71	2.5	27
Business person	390	1.23	87.2	340	4.4	17	7.2	28	1.3	5
Sales and services	105	1.10	94.3	99	1.9	2	2.9	3	1.0	1
Skilled Manual	96	1.04	96.9	93	2.1	2	1.0	1	0.0	0
Housework/housewife	142	1.13	91.5	130	3.5	5	4.9	7	0.0	0
Teacher	46	1.00	100.0	46	0.0	0	0.0	0	0.0	0
University Student	44	1.11	93.2	41	4.5	2	0.0	0	2.3	1
Non-university student	250	1.15	91.6	229	2.8	7	4.4	11	1.2	3
Professional-technical-management	90	1.19	90.0	81	2.2	2	6.7	6	1.1	1
Government official	93	1.24	86.0	80	4.3	4	9.7	9	0.0	0
Forestry Worker	5	1.40	80.0	4	0.0	0	20.0	1	0.0	0
Coastal fisherman/woman	35	1.14	91.4	32	2.9	1	5.7	2	0.0	0
Freshwater fisherman/woman	35	1.26	88.6	31	0.0	0	8.6	3	2.9	1

$\chi^2=65.66$
df=12, P=0.000

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 58: To what extent do you agree that you can find the information you need to respond to the changing weather?

Base: All respondents

	Base	Mean	I can find the information I need to respond to the changing weather								
			Disagree		Neutral		Agree		Don't know		
			%	#	%	#	%	#	%	#	
All Respondents	2401	1.93	51.7	1242	7.1	171	38.0	912	3.2	76	
Sex(*)											
Male	1203	1.96	48.7	586	9.4	113	39.1	470	2.8	34	$X^2=23.32$ $df=3, P=0.000$
Female	1198	1.89	54.8	656	4.8	58	36.9	442	3.5	42	
Residence(*)											
Urban	820	2.04	45.4	372	8.2	67	43.7	358	2.8	23	$X^2=22.73$ $df=3, P=0.000$
Rural	1581	1.87	55.0	870	6.6	104	35.0	554	3.4	53	
Region(*)											
Phnom Penh	200	1.76	60.5	121	4.5	9	33.5	67	1.5	3	$X^2=95.59$ $df=12$ $P=0.000$
Plain	676	1.81	58.7	397	7.7	52	27.8	188	5.8	39	
Tonle Sap	750	2.07	44.0	330	8.1	61	44.7	335	3.2	24	
Coastal	300	1.79	56.3	169	9.3	28	33.7	101	0.7	2	
Mountain	475	2.03	47.4	225	4.4	21	46.5	221	1.7	8	
Ethnicity											
Khmer	2254	1.90	51.4	1158	7.4	167	38.0	856	3.2	73	
Indigenous people	89	1.90	52.8	47	3.4	3	41.6	37	2.2	2	
Cham	47	1.70	63.8	30	2.1	1	31.9	15	2.1	1	
Household Member											
1-3	439	2.00	49.4	217	8.4	37	38.0	167	4.1	18	
4-6	1404	1.90	52.3	734	6.6	93	37.7	530	3.3	47	
7-Over	558	1.90	52.2	291	7.3	41	38.5	215	2.0	11	
Age(*)											
15-24	787	2.04	45.5	358	7.6	60	44.5	350	2.4	19	$X^2=45.38$ $df=9$ $P=0.000$
25-34	712	1.91	51.1	364	9.0	64	37.5	267	2.4	17	
35-44	495	1.88	55.8	276	5.1	25	34.3	170	4.8	24	
45-55	407	1.79	60.0	244	5.4	22	30.7	125	3.9	16	
Education(*)											
No Schooling	257	1.72	63.8	164	4.7	12	27.6	71	3.9	10	$X^2=136.15$ $df=12$ $P=0.000$
Primary School	988	1.84	57.3	566	5.7	56	32.4	320	4.7	46	
Secondary School	682	1.94	50.1	342	7.6	52	40.3	275	1.9	13	
High School	382	2.19	37.7	144	7.6	29	53.1	203	1.6	6	
University	92	2.21	28.3	26	23.9	22	46.7	43	1.1	1	
PPI Index(*)											
Poorest (0-24)	257	1.74	62.3	160	4.3	11	30.4	78	3.1	8	$X^2=32.07$ $df=9$ $P=0.000$
Poor (25-49)	942	1.88	54.5	513	6.5	61	35.5	334	3.6	34	
Medium (50-74)	960	1.97	48.6	467	8.4	81	40.2	386	2.7	26	
High (75-100)	242	2.12	42.1	102	7.4	18	47.1	114	3.3	8	
Working Youth											
No	1901	1.93	51.8	984	7.3	139	37.5	713	3.4	65	
Yes	500	1.93	51.6	258	6.4	32	39.8	199	2.2	11	
Landowner											
No	300	1.92	52.7	158	6.7	20	36.7	110	4.0	12	
Yes	2101	1.93	51.6	1084	7.2	151	38.2	802	3.0	64	
Occupation											
Farmer	1096	1.84	57.0	625	5.9	65	33.5	367	3.6	39	
Business person	390	1.88	54.6	213	5.6	22	37.2	145	2.6	10	
Sales and services	105	1.88	54.3	57	6.7	7	36.2	38	2.9	3	
Skilled Manual	96	1.79	57.3	55	7.3	7	34.4	33	1.0	1	
Housework/housewife	142	1.87	56.3	80	5.6	8	33.1	47	4.9	7	
Teacher	46	2.30	26.1	12	19.6	9	52.2	24	2.2	1	
University Student	44	2.32	25.0	11	20.5	9	52.3	23	2.3	1	
Non-university student	250	2.22	36.0	90	8.8	22	52.4	131	2.8	7	
Professional-technical-management	90	2.09	44.4	40	6.7	6	44.4	40	4.4	4	
Government official	93	2.30	30.1	28	11.8	11	55.9	52	2.2	2	
Forestry Worker	5	2.20	40.0	2	0.0	0	60.0	3	0.0	0	
<i>Coastal fisherman/woman</i>	35	1.60	65.7	23	8.6	3	25.7	9	0.0	0	
<i>Freshwater fisherman/woman</i>	35	1.54	68.6	24	11.4	4	17.1	6	2.9	1	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 59: To what extent do you agree that your community can respond to the changing weather?
Base: All respondents

	Base	Mean	My community can respond to the changing weather								
			Disagree		Neutral		Agree		Don't know		
			%	#	%	#	%	#	%	#	
All Respondents	2401	1.99	49.4	1187	10.7	256	31.0	745	8.9	213	
Sex(*)											$\chi^2=44.14$
Male	1203	1.90	51.0	614	13.1	157	30.3	365	5.6	67	
Female	1198	2.08	47.8	573	8.3	99	31.7	380	12.2	146	$df=3, P=0.000$
Residence											
Urban	820	2.05	47.4	389	10.2	84	32.6	267	9.8	80	
Rural	1581	1.97	50.5	798	10.9	172	30.2	478	8.4	133	
Region(*)											$\chi^2=109.21$
Phnom Penh	200	1.96	58.0	116	<i>1.0</i>	2	28.5	57	12.5	25	$df=12$
Plain	676	1.92	54.7	370	9.8	66	<i>24.1</i>	163	11.4	77	$P=0.000$
Tonle Sap	750	1.99	48.3	362	10.9	82	34.7	260	6.1	46	
Coastal	300	1.80	52.3	157	17.7	53	<i>27.7</i>	83	2.3	7	
Mountain	475	2.24	38.3	182	11.2	53	38.3	182	12.2	58	
Ethnicity(*)											$\chi^2=17.18$
Khmer	2254	2.00	49.7	1120	10.9	246	30.8	694	8.6	194	$df=6$
Indigenous people	89	2.40	<i>37.1</i>	33	6.7	6	38.2	34	18.0	16	$P=0.008$
Cham	47	1.70	61.7	29	8.5	4	25.5	12	4.3	2	
Household Member											
1-3	439	2.10	46.2	203	10.3	45	34.4	151	9.1	40	
4-6	1404	1.90	51.5	723	11.3	159	29.0	407	8.2	115	
7-Over	558	2.10	46.8	261	9.3	52	33.5	187	10.4	58	
Age(*)											$\chi^2=36.15$
15-24	787	2.15	<i>41.9</i>	330	10.8	85	38.0	299	9.3	73	$df=9$
25-34	712	1.92	52.7	375	10.0	71	29.8	212	7.6	54	$P=0.000$
35-44	495	1.91	53.7	266	10.7	53	<i>26.1</i>	129	9.5	47	
45-55	407	1.92	53.1	216	11.5	47	25.8	105	9.6	39	
Education(*)											$\chi^2=24.53$
No Schooling	257	1.97	51.8	133	11.3	29	24.9	64	12.1	31	$df=12$
Primary School	988	1.97	50.9	503	10.7	106	28.6	283	9.7	96	$P=0.017$
Secondary School	682	2.00	48.7	332	10.9	74	32.1	219	8.4	57	
High School	382	2.06	45.5	174	9.7	37	37.7	144	7.1	27	
University	92	1.93	48.9	45	10.9	10	38.0	35	2.2	2	
PPI Index											
Poorest (0-24)	257	2.09	44.7	115	12.5	32	31.5	81	11.3	29	
Poor (25-49)	942	1.99	48.8	460	11.1	105	31.7	299	8.3	78	
Medium (50-74)	960	1.96	51.3	492	10.0	96	29.9	287	8.9	85	
High (75-100)	242	2.00	49.6	120	9.5	23	32.2	78	8.7	21	
Working Youth(*)											$\chi^2=10.76$
No	1901	1.96	50.7	963	11.0	210	30.0	571	8.3	157	$df=3, P=0.013$
Yes	500	2.12	<i>44.8</i>	224	9.2	46	34.8	174	11.2	56	
Landowner											
No	300	1.96	51.3	154	9.7	29	30.7	92	8.3	25	
Yes	2101	2.00	49.2	1033	10.8	227	31.1	653	8.9	188	
Occupation											
Farmer	1096	1.98	50.1	549	11.1	122	29.7	326	9.0	99	
Business person	390	1.97	51.0	199	10.8	42	28.5	111	9.7	38	
Sales and services	105	1.88	54.3	57	11.4	12	26.7	28	7.6	8	
Skilled Manual	96	1.96	55.2	53	6.2	6	26.0	25	12.5	12	
Housework/housewife	142	2.12	46.5	66	9.9	14	28.9	41	14.8	21	
Teacher	46	1.76	60.9	28	4.3	2	32.6	15	2.2	1	
University Student	44	1.82	50.0	22	18.2	8	31.8	14	0.0	0	
Non-university student	250	2.22	<i>36.0</i>	90	12.4	31	44.8	112	6.8	17	
Professional-technical-management	90	1.93	55.6	50	6.7	6	26.7	24	11.1	10	
Government official	93	2.05	47.3	44	6.5	6	39.8	37	6.5	6	
Forestry Worker	5	1.80	40.0	2	40.0	2	20.0	1	0.0	0	
<i>Coastal fisherman/woman</i>	35	1.71	62.9	22	11.4	4	17.1	6	8.6	3	
<i>Freshwater fisherman/woman</i>	35	1.63	62.9	22	11.4	4	25.7	9	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 60: To what extent do you agree that your community has the resources they need to respond to the changing weather?

Base: All respondents

	My community has the resources we need to respond to the changing weather									
	Base	Mean	Disagree		Neutral		Agree		Don't know	
			%	#	%	#	%	#	%	#
All Respondents	2401	1.93	52.4	1258	10.9	262	27.6	662	9.1	219
Sex										
Male	1203	1.91	53.8	647	10.6	128	26.5	319	9.1	109
Female	1198	1.96	51.0	611	11.2	134	28.6	343	9.2	110
Residence										
Urban	820	2.02	49.3	404	10.1	83	30.1	247	10.5	86
Rural	1581	1.89	54.0	854	11.3	179	26.2	415	8.4	133
Region(*)										
Phnom Penh	200	1.97	59.5	119	3.0	6	19.0	38	18.5	37
Plain	676	1.78	61.4	415	8.9	60	19.8	134	9.9	67
Tonle Sap	750	2.01	45.1	338	16.0	120	31.9	239	7.1	53
Coastal	300	1.68	61.7	185	12.0	36	23.3	70	3.0	9
Mountain	475	2.18	42.3	201	8.4	40	38.1	181	11.2	53
Ethnicity(*)										
Khmer	2254	1.90	53.1	1198	11.2	253	27.0	608	8.7	195
Indigenous people	89	2.60	28.1	25	2.2	2	49.4	44	20.2	18
Cham	47	1.60	66.0	31	14.9	7	12.8	6	6.4	3
Household Member										
1-3	439	1.90	52.4	230	11.2	49	28.7	126	7.7	34
4-6	1404	1.90	53.5	751	10.3	145	26.6	374	9.5	134
7-Over	558	2.00	49.6	277	12.2	68	29.0	162	9.1	51
Age(*)										
15-24	787	2.03	46.9	369	11.7	92	32.8	258	8.6	68
25-34	712	1.94	52.8	376	10.0	71	27.9	199	9.3	66
35-44	495	1.83	57.6	285	10.9	54	22.6	112	8.9	44
45-55	407	1.87	56.0	228	11.1	45	22.9	93	10.1	41
Education										
No Schooling	257	2.00	51.4	132	8.2	21	30.0	77	10.5	27
Primary School	988	1.88	55.0	543	11.2	111	24.7	244	9.1	90
Secondary School	682	1.95	51.0	348	12.2	83	27.3	186	9.5	65
High School	382	2.04	47.4	181	10.5	40	33.2	127	8.9	34
University	92	1.78	58.7	54	7.6	7	30.4	28	3.3	3
PPI Index										
Poorest (0-24)	257	1.99	51.4	132	7.8	20	31.1	80	9.7	25
Poor (25-49)	942	1.89	53.7	506	12.1	114	26.1	246	8.1	76
Medium (50-74)	960	1.94	52.7	506	10.4	100	27.4	263	9.5	91
High (75-100)	242	2.05	47.1	114	11.6	28	30.2	73	11.2	27
Working Youth										
No	1901	1.91	53.7	1020	10.7	204	26.7	507	8.9	170
Yes	500	2.03	47.6	238	11.6	58	31.0	155	9.8	49
Landowner(*)										
No	300	2.01	52.0	156	7.7	23	27.7	83	12.7	38
Yes	2101	1.92	52.5	1102	11.4	239	27.6	579	8.6	181
Occupation										
Farmer	1096	1.92	53.5	586	10.7	117	26.3	288	9.6	105
Business person	390	1.95	52.1	203	11.0	43	26.4	103	10.5	41
Sales and services	105	1.88	57.1	60	6.7	7	27.6	29	8.6	9
Skilled Manual	96	1.74	64.6	62	7.3	7	17.7	17	10.4	10
Housework/housewife	142	2.07	45.8	65	12.7	18	30.3	43	11.3	16
Teacher	46	1.67	56.5	26	21.7	10	19.6	9	2.2	1
University Student	44	1.91	54.5	24	6.8	3	31.8	14	6.8	3
Non-university student	250	2.04	45.2	113	12.4	31	35.6	89	6.8	17
Professional-technical-management	90	2.13	41.1	37	14.4	13	34.4	31	10.0	9
Government official	93	1.88	54.8	51	9.7	9	28.0	26	7.5	7
Forestry Worker	5	1.80	60.0	3	0.0	0	40.0	2	0.0	0
Coastal fisherman/woman	35	1.66	62.9	22	8.6	3	28.6	10	0.0	0
Freshwater fisherman/woman	35	1.69	65.7	23	5.7	2	22.9	8	5.7	2

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 61: To what extent do you agree that your community is able to respond to drought?
Base: All respondents

	My community is able to respond to drought										
	Base	Mean	Disagree		Neutral		Agree		Don't know		
			%	#	%	#	%	#	%	#	
All Respondents	2401	1.81	58.5	1405	9.6	231	24.7	593	7.2	172	
Sex(*)											
Male	1203	1.75	59.2	712	11.1	134	25.0	301	4.7	56	$X^2=27.24$ $df=3, P=0.000$
Female	1198	1.86	57.8	693	<i>8.1</i>	97	24.4	292	9.7	116	
Residence(*)											
Urban	820	1.91	<i>54.8</i>	449	8.9	73	27.0	221	9.4	77	$X^2=14.86$ $df=3, P=0.002$
Rural	1581	1.75	60.5	956	10.0	158	23.5	372	6.0	95	
Region(*)											
Phnom Penh	200	1.89	61.5	123	<i>0.5</i>	1	26.0	52	12.0	24	$X^2=64.26$ $df=12, P=0.000$
Plain	676	1.78	60.4	408	9.2	62	<i>23.1</i>	156	7.4	50	
Tonle Sap	750	1.79	58.4	438	10.9	82	24.1	181	6.5	49	
Coastal	300	1.62	62.7	188	15.7	47	<i>18.3</i>	55	3.3	10	
Mountain	475	1.96	52.2	248	8.2	39	31.4	149	8.2	39	
Ethnicity(*)											
Khmer	2254	1.80	59.0	1330	9.7	219	24.4	549	6.9	156	$x^2=15.52$ $df=6$ $P=0.017$
Indigenous people	89	2.10	47.2	42	5.6	5	32.6	29	14.6	13	
Cham	47	1.70	61.7	29	14.9	7	19.1	9	4.3	2	
Household Member											
1-3	439	1.80	56.7	249	8.7	38	28.0	123	6.6	29	
4-6	1404	1.80	60.5	850	9.0	126	23.4	329	7.1	99	
7-Over	558	1.90	54.8	306	12.0	67	25.3	141	7.9	44	
Sex(*)											
15-24	787	1.94	53.0	417	8.8	69	29.6	233	8.6	68	$X^2=30.05$ $df=9, P=0.000$
25-34	712	1.80	58.8	419	9.6	68	24.7	176	6.9	49	
35-44	495	1.64	64.8	321	10.9	54	19.2	95	5.1	25	
45-55	407	1.76	60.9	248	9.8	40	21.9	89	7.4	30	
Education											
No Schooling	257	1.81	60.3	155	8.2	21	21.4	55	10.1	26	
Primary School	988	1.75	60.8	601	10.0	99	22.4	221	6.8	67	
Secondary School	682	1.85	56.6	386	9.1	62	27.0	184	7.3	50	
High School	382	1.84	56.0	214	10.2	39	27.5	105	6.3	24	
University	92	1.88	53.3	49	10.9	10	30.4	28	5.4	5	
PPI Index											
Poorest (0-24)	257	1.85	56.0	144	11.3	29	24.1	62	8.6	22	
Poor (25-49)	942	1.76	60.6	571	9.9	93	22.7	214	6.8	64	
Medium (50-74)	960	1.80	58.0	557	10.0	96	25.7	247	6.3	60	
High (75-100)	242	1.95	55.0	133	5.4	13	28.9	70	10.7	26	
Working Youth(*)											
No	1901	1.79	58.7	1115	10.5	200	24.3	462	6.5	124	$X^2=13.52$ $df=3, P=0.004$
Yes	500	1.87	58.0	290	6.2	31	26.2	131	9.6	48	
Landowner											
No	300	1.85	57.3	172	8.0	24	27.3	82	7.3	22	
Yes	2101	1.80	58.7	1233	9.9	207	24.3	511	7.1	150	
Occupation											
Farmer	1096	1.71	62.6	686	9.9	109	21.8	239	5.7	62	
Business person	390	1.87	57.4	224	9.2	36	22.6	88	10.8	42	
Sales and services	105	1.82	57.1	60	9.5	10	27.6	29	5.7	6	
Skilled Manual	96	1.80	63.5	61	1.0	1	27.1	26	8.3	8	
Housework/housewife	142	1.92	55.6	79	7.7	11	25.4	36	11.3	16	
Teacher	46	1.74	60.9	28	6.5	3	30.4	14	2.2	1	
University Student	44	1.98	45.5	20	20.5	9	25.0	11	9.1	4	
Non-university student	250	2.05	<i>44.8</i>	112	12.0	30	36.8	92	6.4	16	
Professional-technical-management	90	1.86	57.8	52	10.0	9	21.1	19	11.1	10	
Government official	93	1.84	55.9	52	8.6	8	31.2	29	4.3	4	
Forestry Worker	5	1.80	60.0	3	20.0	1	0.0	0	20.0	1	
<i>Coastal fisherman/woman</i>	35	1.74	60.0	21	11.4	4	22.9	8	5.7	2	
<i>Freshwater fisherman/woman</i>	35	1.34	82.9	29	0.0	0	17.1	6	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 62: To what extent do you agree that your community is able to respond to floods?
Base: All respondents

	My community is able to respond to floods										
	Base	Mean	Disagree		Neutral		Agree		Don't know		
			%	#	%	#	%	#	%	#	
All Respondents	2401	1.90	56.4	1354	8.2	196	24.9	599	10.5	252	
Sex(*)											$X^2=47.76$ $df=3, P=0.000$
Male	1203	1.75	61.2	736	9.2	111	22.7	273	6.9	83	
Female	1198	2.04	51.6	618	7.1	85	27.2	326	14.1	169	
Residence											
Urban	820	1.91	55.6	456	7.9	65	25.9	212	10.6	87	
Rural	1581	1.89	56.8	898	8.3	131	24.5	387	10.4	165	
Region(*)											$X^2=113.02$ $df=12, P=0.000$
Phnom Penh	200	1.85	65.0	130	<i>1.0</i>	2	<i>18.5</i>	37	15.5	31	
Plain	676	1.83	62.7	424	<i>4.7</i>	32	<i>19.8</i>	134	12.7	86	
Tonle Sap	750	1.88	55.3	415	10.0	75	26.0	195	8.7	65	
Coastal	300	1.86	50.7	152	17.7	53	26.3	79	5.3	16	
Mountain	475	2.06	49.1	233	7.2	34	32.4	154	11.4	54	
Ethnicity(*)											$X^2=17.47$ $df=6$ $P=0.008$
Khmer	2254	1.90	57.0	1285	8.2	185	24.5	553	10.2	231	
Indigenous people	89	2.30	41.6	37	4.5	4	37.1	33	16.9	15	
Cham	47	1.80	57.4	27	14.9	7	19.1	9	8.5	4	
Household Member											
1-3	439	1.90	56.0	246	8.4	37	26.2	115	9.3	41	
4-6	1404	1.90	57.6	809	7.8	109	23.9	336	10.7	150	
7-Over	558	1.90	53.6	299	9.0	50	26.5	148	10.9	61	
Age											
15-24	787	1.96	53.1	418	8.9	70	26.8	211	11.2	88	
25-34	712	1.88	57.3	408	7.4	53	24.9	177	10.4	74	
35-44	495	1.81	59.8	296	8.1	40	23.6	117	8.5	42	
45-55	407	1.90	57.0	232	8.1	33	23.1	94	11.8	48	
Education											
No Schooling	257	1.93	56.4	145	8.2	21	21.8	56	13.6	35	
Primary School	988	1.89	56.5	558	8.0	79	25.6	253	9.9	98	
Secondary School	682	1.91	56.3	384	8.1	55	23.9	163	11.7	80	
High School	382	1.91	54.7	209	8.6	33	27.7	106	8.9	34	
University	92	1.71	63.0	58	8.7	8	22.8	21	5.4	5	
PPI Index											
Poorest (0-24)	257	1.90	55.3	142	8.9	23	26.1	67	9.7	25	
Poor (25-49)	942	1.88	56.9	536	8.5	80	24.1	227	10.5	99	
Medium (50-74)	960	1.91	55.8	536	7.5	72	26.8	257	9.9	95	
High (75-100)	242	1.89	57.9	140	8.7	21	19.8	48	13.6	33	
Working Youth											
No	1901	1.88	57.0	1084	8.3	157	24.7	469	10.0	191	
Yes	500	1.96	54.0	270	7.8	39	26.0	130	12.2	61	
Landowner											
No	300	1.91	57.3	172	6.0	18	24.7	74	12.0	36	
Yes	2101	1.89	56.3	1182	8.5	178	25.0	525	10.3	216	
Occupation											
Farmer	1096	1.90	56.8	622	7.7	84	24.8	272	10.8	118	
Business person	390	1.95	56.4	220	6.2	24	23.6	92	13.8	54	
Sales and services	105	1.75	62.9	66	6.7	7	22.9	24	7.6	8	
Skilled Manual	96	1.71	66.7	64	<i>3.1</i>	3	22.9	22	7.3	7	
Housework/housewife	142	2.04	49.3	70	11.3	16	25.4	36	14.1	20	
Teacher	46	2.13	41.3	19	13.0	6	37.0	17	8.7	4	
University Student	44	1.68	61.4	27	18.2	8	11.4	5	9.1	4	
Non-university student	250	1.98	50.4	126	10.0	25	30.4	76	9.2	23	
Professional-technical-management	90	1.81	61.1	55	7.8	7	20.0	18	11.1	10	
Government official	93	1.75	58.1	54	11.8	11	26.9	25	3.2	3	
Forestry Worker	5	1.80	40.0	2	40.0	2	20.0	1	0.0	0	
<i>Coastal fisherman/woman</i>	35	1.71	65.7	23	5.7	2	20.0	7	8.6	3	
<i>Freshwater fisherman/woman</i>	35	1.54	71.4	25	5.7	2	20.0	7	2.9	1	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

**Table 63: What would you say are the barriers to taking action to respond to the impact of weather changes?
Base: All respondents**

	What would you say are the barriers to taking action to respond to the impact of weather changes?													
	Base	Not enough money		Lack of tools		Lack of knowledge		Others						
		%	#	%	#	%	#	%	#					
All Respondents	2401	60.0	1440	40.8	980	25.4	609	16.4	394					
Sex(*)														
Male	1203	59.8	719	43.8	527	30.0	361	15.5	187	$X^2=8.92$	$X^2=27.46$			
Female	1198	60.2	721	37.8	453	20.7	248	17.3	207	$df=1, P=0.003$	$df=1, P=0.000$			
Residence(*)														
Urban	820	52.8	433	34.0	279	32.3	265	20.1	165	$X^2=26.67$	$X^2=23.78$	$X^2=31.79$	$X^2=12.51$	
Rural	1581	63.7	1007	44.3	701	21.8	344	14.5	229	$df=1, P=0.000$	$df=1, P=0.000$	$df=1, P=0.000$	$df=1, P=0.000$	
Region(*)														
Phnom Penh	200	46.0	92	29.5	59	39.5	79	19.0	38	$X^2=127.83$	$X^2=182.45$	$X^2=33.52$	$X^2=107.76$	
Plain	676	49.6	335	31.8	215	24.4	165	25.4	172	$df=4$	$df=4$	$df=4$	$df=4$	
Tonle Sap	750	57.1	428	32.0	240	25.9	194	18.4	138	$P=0.000$	$P=0.000$	$P=0.000$	$P=0.000$	
Coastal	300	77.3	232	55.0	165	16.7	50	3.3	10					
Mountain	475	74.3	353	63.4	301	25.5	121	7.6	36					
Ethnicity (*)														
Khmer	2254	59.5	1342	40.4	910	26.0	585	16.7	376	$X^2=10.02$				
Indigenous people	89	66.3	59	55.1	49	15.7	14	12.4	11	$df=2, p=0.007$				
Cham	47	61.7	29	29.8	14	19.1	9	14.9	7					
Household Member (*)														
1-3	439	62.4	274	35.8	157	23.7	104	17.5	77	$X^2=11.13$				
4-6	1404	59.8	839	40.3	566	26.7	375	16.5	231	$df=2, p=0.004$				
7-Over	558	58.6	327	46.1	257	23.3	130	15.4	86					
Age														
15-24	787	59.7	470	42.1	331	26.7	210	16.0	126					
25-34	712	60.8	433	40.3	287	27.4	195	17.1	122					
35-44	495	61.4	304	39.6	196	22.6	112	17.0	84					
45-55	407	57.2	233	40.8	166	22.6	92	15.2	62					
Education(*)														
No Schooling	257	65.4	168	41.6	107	15.2	39	14.8	38	$X^2=88.27$	$X^2=11.62$			
Primary School	988	60.5	598	40.6	401	20.0	198	18.5	183	$df=4$	$df=4$			
Secondary School	682	57.3	391	41.8	285	26.4	180	17.2	117	$P=0.000$	$P=0.02$			
High School	382	60.2	230	39.5	151	39.3	150	12.3	47					
University	92	57.6	53	39.1	36	45.7	42	9.8	9					
PPI Index(*)														
Poorest (0-24)	257	68.1	175	52.1	134	18.3	47	10.9	28	$X^2=31.91$	$X^2=43.49$	$X^2=47.31$	$X^2=12.17$	
Poor (25-49)	942	64.0	603	45.8	431	20.5	193	15.1	142	$df=3$	$df=3$	$df=3$	$df=3$	
Medium (50-74)	960	56.9	546	35.1	337	28.6	275	18.1	174	$P=0.000$	$P=0.000$	$P=0.000$	$P=0.007$	
High (75-100)	242	47.9	116	32.2	78	38.8	94	20.7	50					
Working Youth														
No	1901	59.9	1138	40.7	774	26.0	494	16.1	306					
Yes	500	60.4	302	41.2	206	23.0	115	17.6	88					
Landowner(*)														
No	300	58.3	175	34.3	103	29.0	87	20.0	60	$X^2=5.96$				
Yes	2101	60.2	1265	41.7	877	24.8	522	15.9	334	$df=1, P=0.015$				
Occupation														
Farmer	1096	64.3	705	45.9	503	18.3	201	14.3	157	$X^2=31.99$				
Business person	390	53.1	207	34.9	136	28.7	112	21.5	84	$df=12, p=0.001$				
Sales and services	105	57.1	60	35.2	37	37.1	39	17.1	18	$X^2=50.10$				
Skilled Manual	96	61.5	59	36.5	35	28.1	27	18.8	18	$df=12, p=0.000$				
Housework/housewife	142	60.6	86	29.6	42	21.1	30	16.9	24	$X^2=88.48$				
Teacher	46	60.9	28	45.7	21	43.5	20	13.0	6	$df=12, p=0.000$				
University Student	44	52.3	23	45.5	20	50.0	22	4.5	2					
Non-university student	250	59.2	148	43.2	108	31.2	78	14.8	37					
Professional-technical-management	90	44.4	40	21.1	19	34.4	31	31.1	28					
Government official	93	58.1	54	39.8	37	40.9	38	15.1	14					
Forestry Worker	5	100.0	5	60.0	3	20.0	1	0.0	0					
Coastal fisherman/woman	35	51.4	18	20.0	7	8.6	3	34.3	12					
Freshwater fisherman/woman	35	54.3	19	37.1	13	22.9	8	17.1	6					

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 64: Do you know of any individual, organisation or government department that is working to respond to the changing weather?

Base: All respondents

	Base	Do you know of any individual, organisation or government department that is working to respond to the changing weather?						
		No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2401	92.7	2226	3.2	77	4.1	98	
Sex(*)								
Male	1203	92.2	1109	4.2	50	3.7	44	$X^2=7.90$ $df=2, P=0.019$
Female	1198	93.2	1117	2.3	27	4.5	54	
Residence								
Urban	820	92.1	755	4.1	34	3.8	31	
Rural	1581	93.0	1471	2.7	43	4.2	67	
Region(*)								
Phnom Penh	200	97.0	194	1.5	3	1.5	3	$X^2=48.52$ $df=8$ $P=0.000$
Plain	676	95.4	645	2.1	14	2.5	17	
Tonle Sap	750	90.3	677	2.7	20	7.1	53	
Coastal	300	89.7	269	7.3	22	3.0	9	
Mountain	475	92.8	441	3.8	18	3.4	16	
Ethnicity								
Khmer	2254	92.8	2091	3.2	73	4.0	90	
Indigenous people	89	93.3	83	2.2	2	4.5	4	
Cham	47	89.4	42	4.3	2	6.4	3	
Household Member								
1-3	439	94.5	415	3.0	13	2.5	11	
4-6	1404	92.4	1297	3.2	45	4.4	62	
7-Over	558	92.1	514	3.4	19	4.5	25	
Age								
15-24	787	92.8	730	3.7	29	3.6	28	
25-34	712	94.4	672	2.4	17	3.2	23	
35-44	495	90.9	450	4.0	20	5.1	25	
45-55	407	91.9	374	2.7	11	5.4	22	
Education(*)								
No Schooling	257	91.1	234	1.9	5	7.0	18	$X^2=62.19$ $df=8$ $P=0.000$
Primary School	988	93.1	920	2.0	20	4.9	48	
Secondary School	682	93.3	636	2.9	20	3.8	26	
High School	382	94.2	360	5.0	19	0.8	3	
University	92	82.6	76	14.1	13	3.3	3	
PPI Index								
Poorest (0-24)	257	90.7	233	2.3	6	7.0	18	
Poor (25-49)	942	92.7	873	3.2	30	4.1	39	
Medium (50-74)	960	93.3	896	3.1	30	3.5	34	
High (75-100)	242	92.6	224	4.5	11	2.9	7	
Working Youth								
No	1901	92.5	1759	3.2	60	4.3	82	
Yes	500	93.4	467	3.4	17	3.2	16	
Landowner(*)								
No	300	96.7	290	1.0	3	2.3	7	$X^2=8.35$ $df=2, P=0.15$
Yes	2101	92.1	1936	3.5	74	4.3	91	
Occupation								
Farmer	1096	92.5	1014	2.6	28	4.9	54	
Business person	390	94.1	367	2.6	10	3.3	13	
Sales and services	105	99.0	104	1.0	1	0.0	0	
Skilled Manual	96	97.9	94	0.0	0	2.1	2	
Housework/housewife	142	95.8	136	2.1	3	2.1	3	
Teacher	46	82.6	38	15.2	7	2.2	1	
University Student	44	81.8	36	13.6	6	4.5	2	
Non-university student	250	93.2	233	2.8	7	4.0	10	
Professional-technical-management	90	95.6	86	0.0	0	4.4	4	
Government official	93	82.8	77	15.1	14	2.2	2	
Forestry Worker	5	100.0	5	0.0	0	0.0	0	
<i>Coastal fisherman/woman</i>	35	94.3	33	0.0	0	5.7	2	
<i>Freshwater fisherman/woman</i>	35	80.0	28	5.7	2	14.3	5	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 65: Who has the most power to respond to the changing weather? (Frequency Table)
Base: All respondents

Items	%	#
The Government	35.2	845
The Prime Minister (Hun Sen)	28.9	695
NGOs	25.4	611
Village chief/local leader	15.8	379
Cambodian people	14.4	346
USA	6.3	152
No one has the power	5.2	124
Scientist	4.0	97
Commune council representative	4.0	95
King	3.9	94
Myself	3.5	83
China	2.9	69
Japan	2.7	65
Europe	2.1	50
Developed countries	2.0	49
God	1.2	30
Friends and family	1.0	24
Rich people	0.9	22
All people in the world	0.4	9
Developing/less developed countries	0.3	8
Industry	0.1	3
Poor countries	0.1	2
Others	0.2	6
Base		2401

**Table 66: Who has the most power to respond to the changing weather?
Base: All respondents**

	Who has the most power to respond to the changing weather?																
	Base	Government		The Prime Minister (Hun Sen)		NGOs		Village chief/local leader		Cambodian people		USA			No one has the power		
		%	#	%	#	%	#	%	#	%	#	%			#	%	#
All Respondents	2401	35.2	845	28.9	695	25.4	611	15.8	379	14.4	346	6.3	152	5.2	124		
Sex(*)																	
Male	1203	39.2	471	28.1	338	29.1	350	15.8	190	15.4	185	8.6	103	7.6	91	<i>X</i> ² =16.56 <i>P</i> =0.000	<i>X</i> ² =16.89 <i>P</i> =0.000
Female	1198	31.2	374	29.8	357	21.8	261	15.8	189	13.4	161	4.1	49	2.8	33	<i>X</i> ² =20.24 <i>P</i> =0.000	<i>X</i> ² =28.35 <i>P</i> =0.000
Residence(*)																	
Urban	820	43.4	356	30.4	249	26.0	213	11.2	92	17.9	147	9.1	75	5.1	42	<i>X</i> ² =36.90 <i>P</i> =0.000	<i>X</i> ² =19.52 <i>P</i> =0.000
Rural	1581	30.9	489	28.2	446	25.2	398	18.2	287	12.6	199	4.9	77	5.2	82	<i>X</i> ² =12.48 <i>P</i> =0.000	<i>X</i> ² =16.649 <i>P</i> =0.000
Region(*)																	
Phnom Penh	200	36.5	73	23.0	46	25.0	50	5.5	11	11.0	22	18.5	37	10.0	20	<i>X</i> ² =57.71 <i>P</i> =0.000	<i>X</i> ² =49.00 <i>P</i> =0.000
Plain	676	29.4	199	25.7	174	23.8	161	10.2	69	9.8	66	6.1	41	7.0	47	<i>X</i> ² =31.84 <i>P</i> =0.000	<i>X</i> ² =101.70 <i>P</i> =0.000
Tonle Sap	750	31.2	234	24.4	183	22.0	165	16.8	126	19.7	148	4.5	34	5.5	41	<i>X</i> ² =44.60 <i>P</i> =0.000	<i>X</i> ² =59.75 <i>P</i> =0.000
Coastal	300	34.7	104	42.7	128	22.3	67	11.3	34	8.3	25	3.0	9	4.0	12	<i>X</i> ² =33.05 <i>P</i> =0.000	
Mountain	475	49.5	235	34.5	164	35.4	168	29.3	139	17.9	85	6.5	31	0.8	4		
Ethnicity(*)																	
Khmer	2254	35.5	800	29.0	653	25.5	574	14.6	329	14.3	323	6.6	148	5.2	118	<i>x</i> ² =74.22 <i>P</i> =0.000	<i>x</i> ² =7.76 <i>P</i> =0.021
Indigenous people	89	30.3	27	21.3	19	27.0	24	48.3	43	15.7	14	2.2	2	0.0	0		
Cham	47	27.7	13	40.4	19	21.3	10	10.6	5	10.6	5	2.1	1	10.6	5		
Household Member(*)																	
1-3	439	33.9	149	26.0	114	23.5	103	14.1	62	14.4	63	7.1	31	5.7	25	<i>x</i> ² =10.37 <i>P</i> =0.006	<i>x</i> ² =6.96 <i>P</i> =0.031
4-6	1404	35.3	495	28.9	406	27.8	390	16.0	224	13.1	184	6.5	91	5.6	78		
7-Over	558	36.0	201	31.4	175	21.1	118	16.7	93	17.7	99	5.4	30	3.8	21		
Age(*)																	
15-24	787	36.6	288	28.8	227	22.7	179	16.0	126	20.1	158	6.6	52	4.2	33	<i>X</i> ² =33.81 <i>P</i> =0.000	
25-34	712	35.0	249	30.3	216	27.1	193	16.0	114	11.9	85	6.7	48	6.7	48		
35-44	495	35.2	174	28.7	142	25.7	127	16.6	82	13.3	66	5.5	27	5.3	26		
45-55	407	32.9	134	27.0	110	27.5	112	14.0	57	9.1	37	6.1	25	4.2	17		
Education(*)																	
No Schooling	257	24.9	64	29.6	76	20.2	52	26.1	67	11.7	30	3.9	10	2.3	6	<i>X</i> ² =149.09 <i>P</i> =0.000	<i>X</i> ² =59.02 <i>P</i> =0.000
Primary School	988	26.6	263	29.8	294	20.5	203	15.7	155	8.8	87	4.1	41	6.3	62	<i>X</i> ² =26.06 <i>P</i> =0.000	<i>X</i> ² =101.31 <i>P</i> =0.000
Secondary School	682	36.5	249	28.2	192	26.0	177	14.4	98	14.1	96	7.0	48	5.0	34	<i>X</i> ² =35.15 <i>P</i> =0.000	
High School	382	53.7	205	30.9	118	35.6	136	13.1	50	26.7	102	10.5	40	4.5	17		
University	92	69.6	64	16.3	15	46.7	43	9.8	9	33.7	31	14.1	13	5.4	5		
PPI Index(*)																	
Poorest (0-24)	257	28.0	72	26.5	68	19.8	51	26.8	69	11.7	30	2.3	6	3.9	10	<i>X</i> ² =38.71 <i>P</i> =0.000	<i>X</i> ² =8.18 <i>P</i> =0.042
Poor (25-49)	942	30.5	287	30.5	287	24.3	229	17.7	167	12.4	117	4.6	43	5.2	49	<i>X</i> ² =41.31 <i>P</i> =0.000	<i>X</i> ² =9.43 <i>P</i> =0.024
Medium (50-74)	960	38.3	368	28.6	275	27.1	260	12.5	120	16.3	156	7.3	70	5.0	48	<i>X</i> ² =35.15 <i>P</i> =0.000	
High (75-100)	242	48.8	118	26.9	65	29.3	71	9.5	23	17.8	43	13.6	33	7.0	17		
Working Youth(*)																	
No	1901	36.3	691	29.3	557	27.6	524	15.4	292	14.0	267	6.2	117	5.2	99	<i>X</i> ² =5.34 <i>P</i> =0.021	
Yes	500	30.8	154	27.6	138	17.4	87	17.4	87	15.8	79	7.0	35	5.0	25		
Landowner(*)																	
No	300	32.0	96	30.3	91	19.7	59	12.7	38	14.3	43	8.3	25	6.0	18	<i>X</i> ² =6.03 <i>P</i> =0.014	
Yes	2101	35.6	749	28.7	604	26.3	552	16.2	341	14.4	303	6.0	127	5.0	106		
Occupation																	
Farmer	1096	29.2	320	28.5	312	24.3	266	19.1	209	10.8	118	4.3	47	4.8	53	<i>X</i> ² =111.828 <i>P</i> =0.000	(Government)
Business person	390	34.1	133	29.0	113	22.6	88	12.8	50	13.1	51	7.2	28	5.9	23		
Sales and services	105	39.0	41	33.3	35	27.6	29	9.5	10	16.2	17	11.4	12	5.7	6		
Skilled Manual	96	24.0	23	28.1	27	17.7	17	8.3	8	10.4	10	9.4	9	12.5	12		
Housework/housewife	142	33.8	48	30.3	43	17.6	25	9.9	14	12.0	17	4.9	7	1.4	2	<i>X</i> ² =44.1 <i>P</i> =0.000	(NGOs)
Teacher	46	76.1	35	15.2	7	41.3	19	21.7	10	26.1	12	4.3	2	2.2	1		
University Student	44	65.9	29	25.0	11	47.7	21	9.1	4	31.8	14	13.6	6	6.8	3		
Non-university student	250	44.0	110	31.6	79	29.6	74	14.4	36	26.8	67	5.6	14	2.4	6		
Professional-technical-management	90	41.1	37	31.1	28	26.7	24	14.4	13	22.2	20	10.0	9	10.0	9		
Government official	93	60.2	56	26.9	25	39.8	37	15.1	14	18.3	17	18.3	17	6.5	6		
Forestry Worker	5	40.0	2	60.0	3	0.0	0	40.0	2	20.0	1	0.0	0	0.0	0		
Coastal fisherman/woman	35	31.4	11	37.1	13	17.1	6	5.7	2	5.7	2	5.7	2	0.0	0		
Freshwater fisherman/woman	35	28.6	10	25.7	9	31.4	11	28.6	10	5.7	2	2.9	1	8.6	3		

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 67: Is there anything you think your government can do to help you cope with the problem of the changing weather?

Base: All respondents

	Is there anything you think your government can do to help you cope with the problem of the changing weather?							
	Base	No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2401	13.9	333	75.1	1803	11.0	265	
Sex(*)								
Male	1203	15.5	187	77.6	934	6.8	82	$\chi^2=45.88$ $df=2, p=0.000$
Female	1198	12.2	146	72.5	869	15.3	183	
Residence(*)								
Urban	820	12.3	101	79.0	648	8.7	71	$\chi^2=11.19$ $df=2, p=0.004$
Rural	1581	14.7	232	73.1	1155	12.3	194	
Region(*)								
Phnom Penh	200	17.0	34	70.0	140	13.0	26	$\chi^2=55.16$ $df=8, p=0.000$
Plain	676	20.4	138	67.3	455	12.3	83	
Tonle Sap	750	12.1	91	76.3	572	11.6	87	
Coastal	300	9.3	28	83.7	251	7.0	21	
Mountain	475	8.8	42	81.1	385	10.1	48	
Ethnicity(*)								
Khmer	2254	13.6	307	75.7	1706	10.7	241	$\chi^2=17.07$ $df=4$ $P=0.002$
Indigenous people	89	19.1	17	58.4	52	22.5	20	
Cham	47	14.9	7	78.7	37	6.4	3	
Household Member								
1-3	439	15.3	67	75.2	330	9.6	42	
4-6	1404	13.9	195	74.5	1046	11.6	163	
7-Over	558	12.7	71	76.5	427	10.8	60	
Age								
15-24	787	13.3	105	77.8	612	8.9	70	
25-34	712	15.3	109	73.2	521	11.5	82	
35-44	495	12.5	62	76.6	379	10.9	54	
45-55	407	14.0	57	71.5	291	14.5	59	
Education(*)								
No Schooling	257	14.4	37	60.3	155	25.3	65	$\chi^2=123.63$ $df=8, p=0.000$
Primary School	988	16.7	165	69.9	691	13.4	132	
Secondary School	682	12.9	88	79.5	542	7.6	52	
High School	382	8.1	31	87.7	335	4.2	16	
University	92	13.0	12	87.0	80	0.0	0	
PPI Index(*)								
Poorest (0-24)	257	16.0	41	65.0	167	19.1	49	$\chi^2=38.05$ $df=6, p=0.000$
Poor (25-49)	942	14.5	137	73.2	690	12.2	115	
Medium (50-74)	960	12.1	116	78.5	754	9.4	90	
High (75-100)	242	16.1	39	79.3	192	4.5	11	
Working Youth								
No	1901	13.6	259	75.6	1437	10.8	205	
Yes	500	14.8	74	73.2	366	12.0	60	
Landowner(*)								
No	300	17.7	53	68.3	205	14.0	42	$\chi^2=8.38$ $df=2, P=0.015$
Yes	2101	13.3	280	76.1	1598	10.6	223	
Occupation								
Farmer	1096	13.9	152	70.3	770	15.9	174	
Business person	390	15.1	59	77.2	301	7.7	30	
Sales and services	105	14.3	15	81.9	86	3.8	4	
Skilled Manual	96	26.0	25	57.3	55	16.7	16	
Housework/housewife	142	12.7	18	73.2	104	14.1	20	
Teacher	46	4.3	2	95.7	44	0.0	0	
University Student	44	11.4	5	86.4	38	2.3	1	
Non-university student	250	10.0	25	86.4	216	3.6	9	
Professional-technical-management	90	8.9	8	84.4	76	6.7	6	
Government official	93	7.5	7	90.3	84	2.2	2	
Forestry Worker	5	0.0	0	100.0	5	0.0	0	
<i>Coastal fisherman/woman</i>	35	17.1	6	65.7	23	17.1	6	
<i>Freshwater fisherman/woman</i>	35	14.3	5	77.1	27	8.6	3	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 68: What can the government do?
Base: Those who said the government can help them cope with the problem of the changing weather

	What can the government do?									
	Base	Stop Deforestation		Give me money		Build irrigation		Plant more trees		
		%	#	%	#	%	#	%	#	
All Respondents	1803	48.1	867	43.3	780	30.2	545	29.5	532	
Sex(*)										
Male	934	59.2	553	33.0	308	29.9	279	39.6	370	$X^2=96.01$
Female	869	36.1	314	54.3	472	30.6	266	18.6	162	$X^2=83.51$
										$X^2=95.19$
										$df=1, P=0.000$
										$df=1, P=0.000$
										$df=1, P=0.000$
Residence(*)										
Urban	648	53.5	347	35.0	227	24.7	160	34.9	226	$X^2=12.09$
Rural	1155	45.0	520	47.9	553	33.3	385	26.5	306	$X^2=27.92$
										$X^2=14.70$
										$X^2=14.03$
										$df=1, P=0.001$
										$df=1, P=0.000$
										$df=1, P=0.000$
Region(*)										
Phnom Penh	140	60.7	85	30.0	42	30.0	42	47.1	66	$X^2=49.86$
Plain	455	40.2	183	34.9	159	36.7	167	26.6	121	$X^2=81.23$
Tonle Sap	572	52.8	302	37.6	215	31.3	179	28.0	160	$df=4, P=0.000$
Coastal	251	34.7	87	58.6	147	35.1	88	24.7	62	$X^2=39.78$
Mountain	385	54.5	210	56.4	217	17.9	69	31.9	123	$X^2=27.33$
										$df=4, P=0.000$
										$df=4, P=0.000$
Ethnicity(*)										
Khmer	1706	48.1	821	42.3	722	30.7	524	29.4	502	$X^2=8.01$
Indigenous people	52	50.0	26	59.6	31	11.5	6	36.5	19	$X^2=9.22$
Cham	37	48.6	18	54.1	20	35.1	13	29.7	11	$df=2$
										$P=0.018$
										$P=0.010$
Household Member										
1-3	330	46.4	153	42.1	139	31.8	105	27.3	90	
4-6	1046	49.7	520	41.6	435	30.9	323	29.9	313	
7-Over	427	45.4	194	48.2	206	27.4	117	30.2	129	
Age(*)										
15-24	612	50.0	306	40.7	249	24.7	151	35.9	220	$X^2=13.92$
25-34	521	47.8	249	44.9	234	33.0	172	26.1	136	$df=3, P=0.003$
35-44	379	44.9	170	44.6	169	32.2	122	27.2	103	$X^2=18.83$
45-55	291	48.8	142	44.0	128	34.4	100	25.1	73	$df=3, P=0.000$
Education(*)										
No Schooling	155	38.1	59	58.1	90	32.9	51	18.1	28	$X^2=54.99$
Primary School	691	39.8	275	50.7	350	33.6	232	19.7	136	$X^2=75.11$
Secondary School	542	51.8	281	42.1	228	29.3	159	34.7	188	$df=4, P=0.000$
High School	335	60.3	202	28.1	94	24.8	83	42.4	142	$X^2=10.16$
University	80	62.5	50	22.5	18	25.0	20	47.5	38	$X^2=87.99$
										$df=4, P=0.038$
										$df=4, P=0.000$
PPI Index(*)										
Poorest (0-24)	167	38.9	65	60.5	101	26.3	44	19.8	33	$X^2=24.34$
Poor (25-49)	690	43.9	303	48.7	336	33.8	233	26.8	185	$X^2=50.97$
Medium (50-74)	754	50.8	383	37.8	285	29.8	225	30.5	230	$df=3, P=0.000$
High (75-100)	192	60.4	116	30.2	58	22.4	43	43.8	84	$X^2=10.93$
										$X^2=29.12$
										$df=3, P=0.012$
										$df=3, P=0.000$
Working Youth										
No	1437	48.2	693	42.7	613	31.3	450	29.2	420	
Yes	366	47.5	174	45.6	167	26.0	95	30.6	112	
Landowner(*)										
No	205	54.6	112	41.5	85	23.4	48	35.6	73	$X^2=3.97$
Yes	1598	47.2	755	43.5	695	31.1	497	28.7	459	$X^2=5.09$
										$X^2=4.14$
										$df=1, P=0.046$
										$df=1, P=0.024$
										$df=1, P=0.042$
Occupation										
Farmer	770	41.6	320	49.9	384	37.4	288	22.7	175	$X^2=59.675$
Business person	301	48.2	145	44.2	133	28.6	86	28.6	86	$X^2=54.162$
Sales and services	86	46.5	40	34.9	30	36.0	31	32.6	28	$df=12$
Skilled Manual	55	56.4	31	30.9	17	32.7	18	34.5	19	$P=0.000$
Housework/housewife	104	37.5	39	50.0	52	20.2	21	15.4	16	$P=0.000$
Teacher	44	68.2	30	29.5	13	13.6	6	45.5	20	$X^2=55.651$
University Student	38	52.6	20	28.9	11	28.9	11	34.2	13	$X^2=84.927$
Non-university student	216	53.7	116	33.8	73	21.8	47	45.4	98	$df=12$
Professional-technical-management	76	71.1	54	21.1	16	15.8	12	38.2	29	$df=12$
Government official	84	66.7	56	39.3	33	19.0	16	48.8	41	$P=0.000$
Forestry Worker	5	40.0	2	60.0	3	20.0	1	40.0	2	$P=0.000$
Coastal fisherman/woman	23	47.8	11	56.5	13	21.7	5	8.7	2	
Freshwater fisherman/woman	27	33.3	9	40.7	11	14.8	4	18.5	5	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 69: Where do you get information from, and which sources do you trust?
Base: All respondents

Items	%	#
TV	70.2	1686
Radio	64.6	1550
Friend/Neighbour	62.6	1503
Village chief	24.0	577
Newspaper	12.0	288
Magazine	9.2	220
Spouse	7.3	176
INGOs/NGOs	6.7	161
School	5.9	141
Commune Chief	5.9	141
Parent	5.0	119
Other family member	4.8	115
Internet	2.2	53
Community information meeting	2.0	47
Government officials	1.9	45
Other	1.5	37
Child	1.5	35
Workshop/Conference	0.7	16
Technical or scientific publication	0.3	8
Concert	0.2	4
Religious leader	0.1	3
Base		2401

Table 71: Have you ever used the Internet?
Base: All respondents

	Base	Have you ever used the Internet?				
		Not internet consumer		Internet consumer		
		%	#	%	#	
All Respondents	2401	96.1	2307	3.9	94	
Sex(*)						
Male	1203	<i>94.1</i>	1132	5.9	71	$X^2=25.30$ $df=1, P=0.000$
Female	1198	98.1	1175	1.9	23	
Residence(*)						
Urban	820	<i>91.2</i>	748	8.8	72	$X^2=78.37$ $df=1, P=0.000$
Rural	1581	98.6	1559	1.4	22	
Region(*)						
Phnom Penh	200	<i>89.0</i>	178	11.0	22	$X^2=30.35$ $df=1$ $P=0.000$
Plain	676	96.3	651	3.7	25	
Tonle Sap	750	96.5	724	3.5	26	
Coastal	300	97.7	293	2.3	7	
Mountain	475	97.1	461	2.9	14	
Ethnicity						
Khmer	2254	95.9	2162	4.1	92	
Indigenous people	89	98.9	88	1.1	1	
Cham	47	97.9	46	2.1	1	
Household Member						
1-3	439	97.0	426	3.0	13	
4-6	1404	96.3	1352	3.7	52	
7-Over	558	94.8	529	5.2	29	
Age(*)						
15-24	787	<i>93.8</i>	738	6.2	49	$X^2=22.80$ $df=3$ $P=0.000$
25-34	712	<i>95.9</i>	683	4.1	29	
35-44	495	97.8	484	2.2	11	
45-55	407	98.8	402	1.2	5	
Education(*)						
No Schooling	257	100.0	257	0.0	0	$X^2=630.01$ $df=4$ $P=0.000$
Primary School	988	99.8	986	0.2	2	
Secondary School	682	97.5	665	2.5	17	
High School	382	92.9	355	7.1	27	
University	92	<i>47.8</i>	44	52.2	48	
PPI Index(*)						
Poorest (0-24)	257	100.0	257	0.0	0	$X^2=92.35$ $df=3$ $P=0.000$
Poor (25-49)	942	98.9	932	1.1	10	
Medium (50-74)	960	94.6	908	5.4	52	
High (75-100)	242	<i>86.8</i>	210	13.2	32	
Working Youth						
No	1901	95.7	1820	4.3	81	
Yes	500	97.4	487	2.6	13	
Landowner						
No	300	97.0	291	3.0	9	
Yes	2101	96.0	2016	4.0	85	
Occupation						
Farmer	4	75.0	3	25.0	1	
Business person	17	64.7	11	35.3	6	
Sales and services	5	60.0	3	40.0	2	
Skilled Manual	8	62.5	5	37.5	3	
Housework/housewife	4	25.0	1	75.0	3	
Teacher	12	33.3	4	66.7	8	
University Student	26	19.2	5	80.8	21	
Non-university student	33	42.4	14	57.6	19	
Professional-technical-management	16	18.8	3	81.3	13	
Government official	20	<i>10.0</i>	2	90.0	18	
Forestry Worker	0	0.0	0	0.0	0	
<i>Coastal fisherman/woman</i>	0	0.0	0	0.0	0	
<i>Freshwater fisherman/woman</i>	1	100.0	1	0.0	0	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 72: When was the last time you listened to radio?
Base: All respondents

	Base	last listen- When was the last time you listen to radio?										radio listener All respondents who have listened within the past month		
		Today/yesterday		In past week		In the past month		In past year		Never		Radio Listener		
		%	#	%	#	%	#	%	#	%	#	%	#	
All Respondents	2401	31.9	765	14.5	348	10.5	252	12.7	306	30.4	730	56.9	1365	
Sex(*)														
Male	1203	38.3	461	17.7	213	9.9	119	12.8	154	21.3	256	65.9	793	X ² =115.58 X ² =80.80
Female	1198	25.4	304	11.3	135	11.1	133	12.7	152	39.6	474	47.7	572	df=4, P=0.000 df=1, P=0.000
Residence														
Urban	820	34.6	284	14.1	116	10.0	82	11.0	90	30.2	248	58.8	482	
Rural	1581	30.4	481	14.7	232	10.8	170	13.7	216	30.5	482	55.9	883	
Region(*)														
Phnom Penh	200	39.5	79	18.5	37	9.0	18	8.5	17	24.5	49	67.0	134	X ² =87.21 X ² =26.05
Plain	676	32.7	221	14.6	99	9.9	67	13.5	91	29.3	198	57.2	387	df=16 df=4
Tonle Sap	750	33.7	253	15.7	118	11.1	83	10.4	78	29.1	218	60.5	454	P=0.000 P=0.000
Coastal	300	27.3	82	10.0	30	13.0	39	25.0	75	24.7	74	50.3	151	
Mountain	475	27.4	130	13.5	64	9.5	45	9.5	45	40.2	191	50.3	239	
Ethnicity (*)														
Khmer	2254	32.0	721	14.8	333	10.6	239	12.7	286	29.9	675	57.4	1293	X ² =16.66 X ² =9.16
Indigenous people	89	28.1	25	7.9	7	5.6	5	11.2	10	47.2	42	41.6	37	df=8, p=0.034 df=2, p=0.010
Cham	47	31.9	15	14.9	7	14.9	7	17.0	8	21.3	10	61.7	29	
Household Member														
1-3	439	29.8	131	11.4	50	11.8	52	15.0	66	31.9	140	53.1	233	
4-6	1404	31.3	440	15.2	213	10.2	143	12.3	173	31.0	435	56.7	796	
7-Over	558	34.8	194	15.2	85	10.2	57	12.0	67	27.8	155	60.2	336	
Age(*)														
15-24	787	37.2	293	16.6	131	11.3	89	13.1	103	21.7	171	65.2	513	X ² =46.99 X ² =34.58
25-34	712	29.4	209	13.5	96	9.4	67	12.6	90	35.1	250	52.2	372	df=12 df=3
35-44	495	27.5	136	13.1	65	10.9	54	12.5	62	36.0	178	51.5	255	P=0.000 P=0.000
45-55	407	31.2	127	13.8	56	10.3	42	12.5	51	32.2	131	55.3	225	
Education(*)														
No Schooling	257	18.7	48	11.3	29	7.8	20	16.0	41	46.3	119	37.7	97	X ² =126.73 X ² =100.48
Primary School	988	27.2	269	13.0	128	11.1	110	13.0	128	35.7	353	51.3	507	df=16 df=4
Secondary School	682	34.3	234	16.6	113	10.9	74	13.6	93	24.6	168	61.7	421	P=0.000 P=0.000
High School	382	43.7	167	16.2	62	11.0	42	10.2	39	18.8	72	70.9	271	
University	92	51.1	47	17.4	16	6.5	6	5.4	5	19.6	18	75.0	69	
PPI Index(*)														
Poorest (0-24)	257	25.3	65	14.4	37	8.9	23	16.0	41	35.4	91	48.6	125	X ² =29.20 X ² =20.23
Poor (25-49)	942	28.7	270	14.1	133	10.8	102	13.8	130	32.6	307	53.6	505	df=12 df=3
Medium (50-74)	960	36.6	351	14.4	138	10.4	100	11.9	114	26.8	257	61.4	589	P=0.004 P=0.000
High (75-100)	242	32.6	79	16.5	40	11.2	27	8.7	21	31.0	75	60.3	146	
Working Youth														
No	1901	31.3	595	14.4	273	10.4	197	12.4	236	31.6	600	56.0	1065	
Yes	500	34.0	170	15.0	75	11.0	55	14.0	70	26.0	130	60.0	300	
Landowner(*)														
No	300	26.3	79	10.3	31	9.0	27	12.3	37	42.0	126	45.7	137	X ² =23.32 X ² =17.48
Yes	2101	32.7	686	15.1	317	10.7	225	12.8	269	28.7	604	58.4	1228	df=4, P=0.000 df=1, P=0.000
Occupation(*)														
Farmer	1096	28.7	315	14.5	159	11.4	125	14.7	161	30.7	336	54.7	599	X ² =91.34
Business person	390	26.2	102	13.3	52	9.7	38	10.0	39	40.8	159	49.2	192	df=12
Sales and services	105	41.0	43	7.6	8	14.3	15	8.6	9	28.6	30	62.9	66	P=0.000
Skilled Manual	96	33.3	32	13.5	13	10.4	10	14.6	14	28.1	27	57.3	55	
Housework/housewife	142	23.9	34	9.9	14	7.0	10	12.0	17	47.2	67	40.8	58	
Teacher	46	50.0	23	15.2	7	8.7	4	6.5	3	19.6	9	73.9	34	
University Student	44	59.1	26	20.5	9	2.3	1	9.1	4	9.1	4	81.8	36	
Non-university student	250	40.0	100	20.0	50	13.2	33	11.6	29	15.2	38	73.2	183	
Professional-technical-management	90	33.3	30	14.4	13	4.4	4	7.8	7	40.0	36	52.2	47	
Government official	93	48.4	45	17.2	16	8.6	8	9.7	9	16.1	15	74.2	69	
Forestry Worker	5	40.0	2	20.0	1	0.0	0	20.0	1	20.0	1	60.0	3	
Coastal fisherman/woman	35	20.0	7	5.7	2	11.4	4	34.3	12	28.6	10	37.1	13	
Freshwater fisherman/woman	35	34.3	12	22.9	8	11.4	4	8.6	3	22.9	8	68.6	24	

Note:
 A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
 Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 73: Radio programmes
Base: Radio listeners

	All respondents who have listened within the past month															
	Radio Listener															
	Sex		Residence				Age				Total					
	Male	Female	Urban	Rural	15-24	25-34	35-44	45-55	%	#						
%	#	%	#	%	#	%	#	%	#	%	#					
Really	0.0	0	0.4	2	0.2	1	0.1	1	0.2	1	0.0	0	0.4	1	0.1	2
Hip Hop Girl	0.1	1	0.0	0	0.0	0	0.1	1	0.2	1	0.0	0	0.0	0	0.1	1
Green Music	0.4	3	0.5	3	0.2	1	0.6	5	1.0	5	0.3	1	0.0	0	0.4	6
Youth and Environment	0.9	7	1.8	10	1.9	9	0.9	8	1.6	8	1.3	5	0.4	1	1.3	3
Te Ki Te	0.8	6	1.2	7	0.6	3	1.1	10	1.6	8	0.8	3	0.8	2	0.0	0
Comedy (*)	7.3	58	6.8	39	6.6	32	7.4	65	10.9	56	5.6	21	4.3	11	4.0	9
Song programme (*)	52.0	412	43.8	250	44.6	215	50.7	447	51.5	264	47.6	177	46.1	117	46.2	104
Health programme (*)	13.9	110	22.9	131	18.0	87	17.5	154	17.5	90	20.4	76	16.5	42	14.7	33
Song request (*)	34.8	276	39.4	225	36.5	176	36.8	325	50.3	258	37.9	141	27.6	70	14.2	32
Education programmes(law,community . .) (*)	22.7	180	18.7	107	24.9	120	18.9	167	17.7	91	23.4	87	22.4	57	23.1	52
News (newspaper/local/abroad) (*)	91.0	722	73.0	417	86.5	417	81.9	722	78.6	403	85.8	319	87.4	222	86.7	195
Discussion on social and political issues (*)	13.4	106	6.7	38	13.7	66	8.8	78	6.2	32	11.8	44	14.2	36	14.2	32
Chat via phone (*)	12.7	101	20.0	114	15.1	73	16.1	142	19.1	98	14.5	54	13.4	34	12.9	29
Advertisement/ job announcement (*)	6.9	55	16.3	93	11.2	54	10.7	94	10.7	55	10.8	40	9.1	23	13.3	30
Other	0.1	1	0.7	4	0.4	2	0.3	3	0.6	3	0.5	2	0.0	0	0.0	0
Base		793		571		482		882		513		372		254		225
																1364

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 75: Radio listening by day

Base: Radio listeners

	radio_listener- All respondents who have listened within the past month													Total	%	#			
	Radio Listener																		
	Sex				Residence				Age										
	Male		Female		Urban		Rural		15-24		25-34		35-44					45-55	
%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#				
Monday	60.7	481	62.5	357	62.7	302	60.8	536	58.1	298	60.2	224	57.9	147	75.1	169	61.4	838	
Tuesday (*)	59.0	468	59.4	339	60.6	292	58.4	515	55.4	284	57.5	214	57.5	146	72.4	163	59.2	807	$\chi^2=20.20, df=3, P=0.000$
Wednesday (*)	59.5	472	58.8	336	60.8	293	58.4	515	55.2	283	58.1	216	57.9	147	72.0	162	59.2	808	$\chi^2=19.10, df=3, P=0.000$
Thursday (*)	59.6	473	57.6	329	60.6	292	57.8	510	55.2	283	56.5	210	56.7	144	73.3	165	58.8	802	$\chi^2=23.72, df=3, P=0.000$
Friday (*)	59.0	468	57.4	328	60.2	290	57.4	506	53.8	276	56.2	209	58.3	148	72.4	163	58.4	796	$\chi^2=23.48, df=3, P=0.000$
Saturday (*)	71.4	566	65.3	373	73.9	356	66.1	583	67.6	347	65.9	245	68.1	173	77.3	174	68.8	939	$\chi^2=5.66, df=1, P=0.017$
Sunday	74.5	591	68.8	393	75.7	365	70.2	619	71.9	369	68.3	254	71.7	182	79.6	179	72.1	984	
Every day (*)	55.7	442	53.1	303	56.2	271	53.7	474	48.9	251	53.5	199	54.7	139	69.3	156	54.6	745	$\chi^2=26.54, df=3, P=0.000$
Don't know (*)	20.6	163	22.1	126	17.8	86	23.0	203	19.7	101	24.5	91	24.4	62	15.6	35	21.2	289	$\chi^2=4.99, df=1, P=0.025$
Base		793		571		482		882		513		372		254		225		1364	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 76: Radio listening by time

Base: Radio listeners

	radio_listener- All respondents who have listened within the past month													Total	%	#			
	Radio Listener																		
	Sex				Residence				Age										
	Male		Female		Urban		Rural		15-24		25-34		35-44					45-55	
%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#		
6:00 AM - 8:00 AM (*)	54.9	435	50.8	290	56.8	274	51.1	451	47.0	241	57.8	215	53.1	135	59.6	134	53.2	725	$\chi^2=4.08, df=1, P=0.043$
8:01AM - 10:00 AM (*)	10.3	82	18.6	106	12.9	62	14.3	126	19.1	98	15.1	56	6.3	16	8.0	18	13.8	188	$\chi^2=18.89, df=1, P=0.000$
10:01 AM - 12:00AM	19.7	156	23.3	133	19.9	96	21.9	193	25.1	129	20.4	76	18.1	46	16.9	38	21.2	289	$\chi^2=8.87, df=3, P=0.031$
12:01 PM - 14:00 PM (*)	27.7	220	31.3	179	25.1	121	31.5	278	34.1	175	26.3	98	29.9	76	22.2	50	29.3	399	$\chi^2=6.19, df=1, P=0.013$
14:01 PM - 16:00 PM (*)	8.7	69	13.7	78	10.6	51	10.9	96	14.6	75	10.8	40	7.5	19	5.8	13	10.8	147	$\chi^2=8.49, df=1, P=0.004$
16:01 PM - 18:00 PM (*)	8.3	66	14.4	82	9.8	47	11.5	101	13.6	70	9.9	37	7.9	20	9.3	21	10.9	148	$\chi^2=12.51, df=1, P=0.000$
18:01 PM - 20:00 PM (*)	42.7	339	28.7	164	34.4	166	38.2	337	31.8	163	34.7	129	42.9	109	45.3	102	36.9	503	$\chi^2=28.06, df=1, P=0.000$
20:01 PM - 22:00 PM (*)	30.6	243	21.4	122	28.2	136	26.0	229	22.6	116	26.3	98	32.7	83	30.2	68	26.8	365	$\chi^2=14.57, df=1, P=0.000$
22:01 PM - 24:00 PM	4.2	33	2.3	13	3.3	16	3.4	30	2.7	14	3.8	14	4.7	12	2.7	6	3.4	46	
24:01 AM - 6:00 AM (*)	1.5	12	2.8	16	1.5	7	2.4	21	1.6	8	0.8	3	2.8	7	4.4	10	2.1	28	$\chi^2=10.52, df=3, P=0.015$
Don't remember	1.3	10	0.9	5	0.0	0	1.7	15	1.2	6	1.6	6	0.4	1	0.9	2	1.1	15	$\chi^2=8.28, df=1, P=0.004$
Base		793		571		482		882		513		372		254		225		1364	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 77: Radio listening by duration
Base: Radio listeners

	Sex				Residence				Age								Total	
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55			
	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
Time per day																		
1 time	47.7	378	49.5	283	49.6	239	47.8	422	45.8	235	50.5	188	51.0	130	48.0	108	48.4	661
2 times	37.3	296	33.9	194	36.5	176	35.6	314	34.9	179	33.3	124	36.5	93	41.8	94	35.9	490
3 times	13.1	104	15.2	87	11.8	57	15.2	134	16.8	86	14.8	55	11.4	29	9.3	21	14.0	191
more than 3 times	1.9	15	1.4	8	2.1	10	1.5	13	2.5	13	1.3	5	1.2	3	0.9	2	1.7	23
Duration per time (*)																		
1-30 minutes	39.1	310	45.3	259	40.5	195	42.4	374	39.4	202	44.1	164	48.6	124	35.1	79	41.7	569
31 to 60 minutes	40.4	320	34.1	195	38.6	186	37.3	329	39.0	200	35.2	131	34.1	87	43.1	97	37.7	515
61 to 120 minutes	16.1	128	12.1	69	16.0	77	13.6	120	14.2	73	15.1	56	13.3	34	15.1	34	14.4	197
more than 120 minutes	4.4	35	8.6	49	5.0	24	6.8	60	7.4	38	5.6	21	3.9	10	6.7	15	6.2	84
Base		793		572		482		883		513		372		255		225		1365

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

$\chi^2 = 19.64$
 $df = 3, P = 0.000$

Table 78: Have you ever listened to a phone-in programme?
Base: Radio listeners

	Have you ever listened to phone-in programme?										Total							
	Sex				Residence				Age									
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55		%	#
%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	
Listen to phone-in programme																		
No	26.5	210	20.5	117	25.5	123	23.1	204	16.0	82	21.2	79	33.1	84	36.4	82	24.0	327
Yes	73.3	581	79.2	452	74.1	357	76.6	676	84.0	431	78.5	292	65.7	167	63.6	143	75.7	1033
Don't Know	0.3	2	0.4	2	0.4	2	0.2	2	0.0	0	0.3	1	1.2	3	0.0	0	0.3	4
Base		793		571		482		882		513		372		254		225		1364

Table 79: Have you ever called in to a phone-in programme?
Base: Phone-in programme listeners

	Have you ever called in to a phone-in programme?										Total							
	Sex				Residence				Age									
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55		%	#
%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	
Called in to programme																		
No	85.4	496	87.2	394	84.9	303	86.8	587	83.5	360	84.6	247	89.8	150	93.0	133	86.2	890
Yes	14.6	85	12.8	58	15.1	54	13.2	89	16.5	71	15.4	45	10.2	17	7.0	10	13.8	143
Base		581		452		357		676		431		292		167		143		1033

**Table 80: Why have you called in to a phone-in programme?
Base: Respondents who had called in to a phone-in programme**

	Sex			Residence				Age				Total		
	Male % #	Female % #	Total % #	Urban % #	Rural % #	15-24 % #	25-34 % #	35-44 % #	45-55 % #	% #	% #			
To request a song (*)	54.1 46	53.4 31	53.8 77	59.3 32	50.6 45	66.2 47	55.6 25	23.5 4	10.0 1	53.8 77	$\chi^2=18.43, df=3, P=0.000$			
To talk about love story	10.6 9	3.4 2	7.7 11	3.7 2	10.1 9	7.0 5	6.7 3	5.9 1	20.0 2	7.7 11				
To have debate on the social problem (*)	28.2 24	5.2 3	18.9 27	14.8 8	21.3 19	12.7 9	20.0 9	35.3 6	30.0 3	18.9 27	$\chi^2=11.97, df=1, P=0.001$			
To tell jokes	8.2 7	6.9 4	7.7 11	5.6 3	9.0 8	4.2 3	13.3 6	5.9 1	10.0 1	7.7 11				
To debate on political issues	5.9 5	0.0 0	3.5 5	1.9 1	4.5 4	2.8 2	2.2 1	0.0 0	20.0 2	3.5 5				
To debate on health issues	18.8 16	20.7 12	19.6 28	22.2 12	18.0 16	16.9 12	22.2 10	29.4 5	10.0 1	19.6 28				
Have good presenter	1.2 1	5.2 3	2.8 4	3.7 2	2.2 2	2.8 2	2.2 1	5.9 1	0.0 0	2.8 4				
Other	14.1 12	27.6 16	19.6 28	16.7 9	21.3 19	18.3 13	20.0 9	23.5 4	20.0 2	19.6 28				
Base	85	58	143	54	89	71	45	17	10	143				

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 81: When was the last time you watched TV?
Base: All respondents

	Base	When was the last time you watched TV?										All respondents who watched TV within the past month			
		Today/ yesterday		In past week		In the past month		In past year		Never		TV viewer			
		%	#	%	#	%	#	%	#	%	#	%	#		
All Respondents	2401	51.5	1237	9.3	223	6.3	152	9.5	228	23.4	561	67.1	1612		
Sex(*)															
Male	1203	54.7	658	10.3	124	8.5	102	8.5	102	18.0	217	73.5	884	X ² =56.90	X ² =43.98
Female	1198	48.3	579	8.3	99	4.2	50	10.5	126	28.7	344	60.8	728	df=4, P=0.000	df=1, P=0.000
Residence(*)															
Urban	820	78.3	642	8.2	67	4.3	35	4.3	35	5.0	41	90.7	744	X ² =398.89	X ² =314.18
Rural	1581	37.6	595	9.9	156	7.4	117	12.2	193	32.9	520	54.9	868	df=4, P=0.000	df=1, P=0.000
Region(*)															
Phnom Penh	200	83.0	166	10.0	20	1.5	3	4.0	8	1.5	3	94.5	189	X ² =255.67	X ² =181.30
Plain	676	62.3	421	9.6	65	7.0	47	8.4	57	12.7	86	78.8	533	df=16	df=4
Tonle Sap	750	46.7	350	9.6	72	5.6	42	10.3	77	27.9	209	61.9	464	P=0.000	P=0.000
Coastal	300	41.3	124	9.3	28	11.0	33	14.3	43	24.0	72	61.7	185		
Mountain	475	37.1	176	8.0	38	5.7	27	9.1	43	40.2	191	50.7	241		
Ethnicity (*)															
Khmer	2254	53.4	1204	9.4	212	6.3	142	9.5	214	21.4	482	69.1	1558	X ² =85.79	
Indigenous people	89	11.2	10	5.6	5	5.6	5	4.5	4	73.0	65	22.5	20	df=2, p=0.000	
Cham	47	40.4	19	12.8	6	6.4	3	17.0	8	23.4	11	59.6	28		
Household Member															
1-3	439	49.4	217	10.3	45	6.4	28	10.9	48	23.0	101	66.1	290		
4-6	1404	53.3	749	8.8	123	5.8	81	9.3	130	22.9	321	67.9	953		
7-Over	558	48.6	271	9.9	55	7.7	43	9.0	50	24.9	139	66.1	369		
Age(*)															
15-24	787	55.5	437	10.0	79	6.0	47	8.1	64	20.3	160	71.5	563	X ² =12.06	
25-34	712	50.7	361	9.6	68	6.0	43	10.8	77	22.9	163	66.3	472	df=3	
35-44	495	50.9	252	8.1	40	6.3	31	9.5	47	25.3	125	65.3	323	P=0.007	
45-55	407	45.9	187	8.8	36	7.6	31	9.8	40	27.8	113	62.4	254		
Education(*)															
No Schooling	257	21.4	55	5.4	14	6.6	17	7.8	20	58.8	151	33.5	86	X ² =425.58	X ² =315.80
Primary School	988	40.2	397	9.7	96	7.8	77	14.2	140	28.1	278	57.7	570	df=16	df=4
Secondary School	682	62.3	425	11.0	75	5.1	35	6.6	45	15.0	102	78.4	535	P=0.000	P=0.000
High School	382	74.1	283	8.4	32	4.5	17	5.5	21	7.6	29	86.9	332		
University	92	83.7	77	6.5	6	6.5	6	2.2	2	1.1	1	96.7	89		
PPI Index(*)															
Poorest (0-24)	257	16.7	43	7.4	19	8.2	21	13.2	34	54.5	140	32.3	83	X ² =515.44	X ² =377.06
Poor (25-49)	942	35.5	334	10.8	102	8.5	80	12.1	114	33.1	312	54.8	516	df=12	df=3
Medium (50-74)	960	68.1	654	9.2	88	4.8	46	7.5	72	10.4	100	82.1	788	P=0.000	P=0.000
High (75-100)	242	85.1	206	5.8	14	2.1	5	3.3	8	3.7	9	93.0	225		
Working Youth(*)															
No	1901	53.3	1013	9.0	172	6.1	116	9.5	181	22.0	419	68.4	1301	X ² =13.71	X ² =6.98
Yes	500	44.8	224	10.2	51	7.2	36	9.4	47	28.4	142	62.2	311	df=4, P=0.008	df=1, P=0.008
Landowner(*)															
No	300	51.7	155	10.0	30	4.3	13	6.0	18	28.0	84	66.0	198	X ² =9.91	
Yes	2101	51.5	1082	9.2	193	6.6	139	10.0	210	22.7	477	67.3	1414	df=4, P=0.042	
Occupation(*)															
Farmer	1096	32.5	356	10.3	113	8.1	89	12.2	134	36.9	404	50.9	558	X ² =285.32	
Business person	390	64.4	251	6.7	26	3.1	12	7.4	29	18.5	72	74.1	289	df=12	
Sales and services	105	71.4	75	14.3	15	1.9	2	6.7	7	5.7	6	87.6	92	P=0.000	
Skilled Manual	96	75.0	72	3.1	3	8.3	8	7.3	7	6.3	6	86.5	83		
Housework/housewife	142	60.6	86	8.5	12	4.9	7	7.0	10	19.0	27	73.9	105		
Teacher	46	65.2	30	10.9	5	10.9	5	6.5	3	6.5	3	87.0	40		
University Student	44	88.6	39	4.5	2	0.0	0	4.5	2	2.3	1	93.2	41		
Non-university student	250	71.6	179	11.2	28	4.4	11	6.0	15	6.8	17	87.2	218		
Professional-technical-management	90	71.1	64	8.9	8	5.6	5	5.6	5	8.9	8	85.6	77		
Government official	93	76.3	71	5.4	5	6.5	6	5.4	5	6.5	6	88.2	82		
Forestry Worker	5	0.0	0	0.0	0	20.0	1	20.0	1	60.0	3	20.0	1		
Coastal fisherman/woman	35	22.9	8	22.9	8	14.3	5	17.1	6	22.9	8	60.0	21		
Freshwater fisherman/woman	35	37.1	13	14.3	5	5.7	2	17.1	6	25.7	9	57.1	20		

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 82: What programme(s) do you usually watch?
Base: TV viewers

	What programme(s) do you usually watch?																		
	Sex				Residence				Age										
	Male		Female		Urban		Rural		15-24		25-34		35-44			45-55		Total	
	%	#	%	#	%	#	%	#	%	#	%	#	%	#		%	#	%	#
Khmer series (*)	41.5	367	65.1	474	50.8	378	53.3	463	59.9	337	51.5	243	46.4	150	43.7	111	52.2	841	X ² =89.06, df=1, P=0.000
International TV film series (*)	72.2	638	83.0	604	76.5	569	77.5	673	82.1	462	79.4	375	74.0	239	65.4	166	77.0	1242	X ² =26.30, df=1, P=0.000
Cellcard Scene (*)	1.6	14	0.7	5	0.5	4	1.7	15	1.8	10	1.1	5	0.3	1	1.2	3	1.2	19	X ² =4.87, df=1, P=0.027
Deal or not Deal	5.2	46	4.8	35	5.4	40	4.7	41	5.7	32	4.7	22	4.3	14	5.1	13	5.0	81	
Sokea Lakena BIG (*)	11.0	97	7.1	52	10.3	77	8.3	72	11.2	63	9.7	46	7.4	24	6.3	16	9.2	149	X ² =6.98, df=1, P=0.008
Sport programme (Boxing, Soccer) (*)	56.6	500	14.3	104	36.4	271	38.4	333	32.7	184	39.6	187	37.2	120	44.5	113	37.5	604	X ² =304.52, df=1, P=0.000
Sam Nouch Tam Phoum (*)	5.5	49	2.2	16	3.8	28	4.3	37	5.0	28	4.2	20	2.5	8	3.5	9	4.0	65	X ² =11.54, df=1, P=0.001
Natural voice	0.6	5	0.3	2	0.4	3	0.5	4	0.5	3	0.6	3	0.0	0	0.4	1	0.4	7	
Environmental debate	1.6	14	1.0	7	1.2	9	1.4	12	1.1	6	2.1	10	0.6	2	1.2	3	1.3	21	
Game programmes (*)	1.8	16	3.4	25	2.6	19	2.5	22	3.4	19	2.1	10	1.5	5	2.8	7	2.5	41	X ² =4.24, df=1, P=0.039
Concert (or comedy) (*)	61.3	542	62.5	455	64.0	476	60.0	521	68.7	387	62.9	297	54.5	176	53.9	137	61.8	997	X ² =25.71, df=3, P=0.000
Cartoon (*)	1.9	17	6.0	44	5.1	38	2.6	23	6.2	35	4.0	19	1.9	6	0.4	1	3.8	61	X ² =18.62, df=1, P=0.000
song programme (*)	21.2	187	24.9	181	26.9	200	19.4	168	31.1	175	23.9	113	16.4	53	10.6	27	22.8	368	X ² =12.88, df=1, P=0.000
Documentary (*)	4.0	35	1.5	11	3.6	27	2.2	19	2.8	16	4.0	19	2.2	7	1.6	4	2.9	46	X ² =8.63, df=1, P=0.003
Educational programmes (*)	10.6	94	6.5	47	10.1	75	7.6	66	8.5	48	8.7	41	9.3	30	8.7	22	8.7	141	X ² =8.72, df=1, P=0.003
Health programmes (*)	4.8	42	7.7	56	7.5	56	4.8	42	6.0	34	7.6	36	4.3	14	5.5	14	6.1	98	X ² =6.04, df=1, P=0.014
Beauty woman programmes (*)	0.9	8	3.3	24	2.3	17	1.7	15	2.7	15	1.7	8	1.5	5	1.6	4	2.0	32	X ² =11.73, df=1, P=0.001
Housewife programme (*)	1.0	9	3.6	26	2.8	21	1.6	14	3.9	22	1.7	8	0.6	2	1.2	3	2.2	35	X ² =12.25, df=1, P=0.000
News (*)	82.5	729	67.9	494	77.6	577	74.4	646	69.3	390	78.2	369	80.8	261	79.9	203	75.9	1223	X ² =46.53, df=1, P=0.000
programme debate	2.5	22	4.0	29	3.4	25	3.0	26	4.1	23	2.1	10	2.8	9	3.5	9	3.2	51	
debate	1.6	14	1.9	14	1.9	14	1.6	14	2.0	11	1.3	6	1.9	6	2.0	5	1.7	28	
Tourism trip (*)	0.9	8	1.9	14	2.2	16	0.7	6	2.0	11	0.6	3	1.9	6	0.8	2	1.4	22	X ² =6.33, df=1, P=0.012
Religious activities (*)	0.2	2	2.2	16	0.9	7	1.3	11	1.4	8	0.8	4	0.6	2	1.6	4	1.1	18	X ² =14.05, df=1, P=0.000
Advertisement, job news (*)	0.9	8	1.2	9	1.6	12	0.6	5	0.7	4	0.6	3	2.5	8	0.8	2	1.1	17	X ² =4.12, df=1, P=0.042
Base		884		728		744		868		563		472		323		254		1612	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 83: What day(s) do you usually watch TV?
Base: TV viewers

	Sex				Residence				Age									
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55		Total	
	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
Monday	72.7	643	82.6	601	83.6	622	71.7	622	79.0	445	76.9	363	75.5	244	75.6	192	77.2	1244
Tuesday	70.7	625	80.9	589	81.9	609	69.7	605	77.1	434	75.2	355	74.0	239	73.2	186	75.3	1214
Wednesday	70.6	624	79.3	577	80.9	602	69.0	599	75.8	427	75.8	358	72.8	235	71.3	181	74.5	1201
Thursday	65.5	579	75.0	546	78.5	584	62.3	541	70.7	398	70.3	332	67.8	219	69.3	176	69.8	1125
Friday	67.9	600	74.0	539	78.1	581	64.3	558	70.7	398	70.1	331	69.0	223	73.6	187	70.7	1139
Saturday	79.6	704	80.1	583	86.0	640	74.5	647	79.9	450	81.8	386	74.6	241	82.7	210	79.8	1287
Sunday	81.9	724	80.2	584	86.2	641	76.8	667	81.0	456	83.5	394	76.8	248	82.7	210	81.1	1308
Don't know	7.9	70	6.9	50	5.2	39	9.3	81	4.6	26	6.6	31	10.5	34	11.4	29	7.4	120
Base		884		728		744		868		563		472		323		254		1612

Table 84: How many times per day do you watch TV? How long do you watch TV for each time you watch it?

Base: TV viewers

	Sex				Residence				Age								Total		
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55				
	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	
Time per day(*)																			
1 time	55.7	492	54.3	395	40.7	303	67.3	584	47.1	265	54.7	258	64.7	209	61.0	155	55.0	887	$X^2=128.81$ $X^2=52.59$ $df=2, p=0.000$ $df=6, p=0.000$
2 times	31.7	280	30.4	221	37.8	281	25.3	220	31.8	179	32.6	154	28.5	92	29.9	76	31.1	501	
More than 3 times	12.7	112	15.4	112	21.5	160	7.4	64	21.1	119	12.7	60	6.8	22	9.1	23	13.9	224	
Duration per time																			
1-30mn	22.6	200	23.1	168	22.7	169	22.9	199	19.7	111	22.9	108	26.9	87	24.4	62	22.8	368	
31-60mn	41.0	362	42.2	307	41.9	312	41.1	357	45.1	254	37.5	177	41.2	133	41.3	105	41.5	669	
More than 60mn	36.4	322	34.8	253	35.3	263	35.9	312	35.2	198	39.6	187	31.9	103	34.3	87	35.7	575	
Base		884		728		744		868		563		472		323		254		1612	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 85: What time do you usually watch TV?

Base: TV viewers

	Sex				Residence				Age								Total			
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55					
	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#		
6:00 AM - 8: 00 AM(*)	25.3	224	12.6	92	25.1	187	14.9	129	19.5	110	19.7	93	20.1	65	18.9	48	19.6	316	$X^2=40.87$ $df=1, p=0.000$ $X^2=10.20$ $df=1, p=0.001$ $X^2=8.27$ $df=1, p=0.004$ $X^2=7.69$ $df=1, p=0.006$ $X^2=12.72$ $df=1, p=0.000$ $X^2=12.68$ $df=1, p=0.000$ $X^2=6.45$ $df=1, p=0.011$	
8:01AM - 10:00 AM(*)	5.8	51	10.0	73	10.6	79	5.2	45	11.4	64	8.1	38	3.7	12	3.9	10	7.7	124		
10:01 AM - 12:00AM(*)	15.6	138	21.2	154	24.5	182	12.7	110	24.0	135	18.9	89	10.8	35	13.0	33	18.1	292		
12:01 PM - 14:00 PM(*)	23.3	206	29.4	214	34.1	254	19.1	166	32.7	184	23.9	113	18.6	60	24.8	63	26.1	420		
14:01 PM - 16:00 PM(*)	10.7	95	5.8	42	9.1	68	7.9	69	6.9	39	11.7	55	6.5	21	8.7	22	8.5	137		
16:01 PM - 18:00 PM(*)	12.8	113	11.4	83	11.2	83	13.0	113	10.8	61	14.0	66	9.6	31	15.0	38	12.2	196		
18:01 PM - 20:00 PM(*)	66.7	590	65.4	476	66.9	498	65.4	568	62.7	353	66.7	315	71.2	230	66.1	168	66.1	1066		
20:01 PM - 22:00 PM	48.0	424	56.9	414	53.6	399	50.6	439	53.8	303	53.4	252	50.5	163	47.2	120	52.0	838		
22:01 PM - 24:00 PM	4.5	40	2.2	16	4.4	33	2.6	23	3.6	20	3.8	18	2.5	8	3.9	10	3.5	56		
24:01 AM - 6:00 AM	0.5	4	0.1	1	0.5	4	0.1	1	0.2	1	0.2	1	0.6	2	0.4	1	0.3	5		
Not remember	1.00	847	1.00	694	1.00	716	1.00	825	1.00	543	0.99	452	1.00	305	0.99	241	1.00	1541		
	0.5	4	0.4	3	0.4	3	0.5	4	0.4	2	0.7	3	0.0	0	0.8	2	0.5	7		
Base		884		728		744		868		563		472		323		254		1612		

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 86: Which TV stations/channels do you watch?
Base: TV viewers

	Which TV stations/channels do you watch?												Total						
	Sex				Residence				Age										
	Male		Female		Urban		Rural		15-24		25-34				35-44		45-55		
%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#		
TV5 (Khemarak Phomin TV) (*)	59.2	523	55.4	403	52.4	390	61.8	536	54.9	309	59.1	279	61.3	198	55.1	140	57.4	926	$\chi^2=14.27, df=1, P=0.000$
Municipal TV (TV3) (*)	38.8	343	33.2	242	38.7	288	34.2	297	38.7	218	37.7	178	33.7	109	31.5	80	36.3	585	$\chi^2=5.33, df=1, P=0.021$
National TV (TVK) (*)	35.7	316	28.7	209	33.1	246	32.1	279	31.1	175	32.0	151	34.1	110	35.0	89	32.6	525	$\chi^2=9.00, df=1, P=0.003$
Khmer TV (CTV9) (*)	34.7	307	28.6	208	26.5	197	36.6	318	29.8	168	37.1	175	30.0	97	29.5	75	31.9	515	$\chi^2=6.96, df=1, P=0.008$
Apsara TV (TV11) (*)	29.8	263	18.7	136	21.9	163	27.2	236	22.7	128	27.5	130	26.0	84	22.4	57	24.8	399	$\chi^2=26.26, df=1, P=0.000$
Bayon TV (TV27) (*)	74.1	655	63.3	461	73.7	548	65.4	568	70.0	394	71.4	337	65.9	213	67.7	172	69.2	1116	$\chi^2=21.74, df=1, P=0.000$
Bayon TV1 (*)	20.2	179	6.2	45	13.6	101	14.2	123	13.1	74	17.2	81	12.1	39	11.8	30	13.9	224	$\chi^2=66.03, df=1, P=0.000$
CTN (*)	75.7	669	72.0	524	84.4	628	65.1	565	75.8	427	76.1	359	68.4	221	73.2	186	74.0	1193	$\chi^2=77.70, df=1, P=0.000$
My TV (*)	37.3	330	32.0	233	41.5	309	29.3	254	46.2	260	35.0	165	25.4	82	22.0	56	34.9	563	$\chi^2=4.98, df=1, P=0.026$
SEA TV (*)	35.1	310	35.7	260	36.2	269	34.7	301	34.3	193	40.3	190	34.4	111	29.9	76	35.4	570	$\chi^2=8.66, df=3, P=0.034$
Battambang TV (*)	1.2	11	0.3	2	0.8	6	0.8	7	0.7	4	1.5	7	0.3	1	0.4	1	0.8	13	$\chi^2=4.69, df=1, P=0.030$
French TV (TV5 Asia)	0.1	1	0.3	2	0.4	3	0.0	0	0.5	3	0.0	0	0.0	0	0.0	0	0.2	3	
Vietnam TV (VTV)	0.1	1	0.7	5	0.5	4	0.2	2	0.4	2	0.2	1	0.6	2	0.4	1	0.4	6	
Satellite TV	3.7	33	3.7	27	3.4	25	4.0	35	4.4	25	3.0	14	2.5	8	5.1	13	3.7	60	
Local Cable TV (*)	8.9	79	11.0	80	17.2	128	3.6	31	9.4	53	13.8	65	7.7	25	6.3	16	9.9	159	$\chi^2=63.74, df=1, P=0.000$
Watched TV, but can't identify channel (*)	0.8	7	1.9	14	0.9	7	1.6	14	0.7	4	0.8	4	2.2	7	2.4	6	1.3	21	$\chi^2=3.97, df=1, P=0.046$
Others	1.5	13	1.8	13	1.6	12	1.6	14	1.6	9	1.7	8	1.5	5	1.6	4	1.6	26	
Base		884		728		744		868		563		472		323		254		1612	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 87: Which channel do you prefer to watch?
Base: TV viewers

	Sex		Residence				Age				Total								
	Male		Female		Urban		Rural		15-24		25-34		35-44		45-55				
	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#			
The most popular																			
TV5 (Khemarak Phomin TV)	12.2	108	13.5	98	5.1	38	19.4	168	13.0	73	10.4	49	14.9	48	14.2	36	12.8	206	
Municipal TV (TV3)	1.0	9	1.0	7	0.9	7	1.0	9	1.4	8	0.8	4	0.9	3	0.4	1	1.0	16	
National TV (TVK)	3.5	31	3.3	24	3.2	24	3.6	31	2.3	13	2.8	13	4.6	15	5.5	14	3.4	55	
Khmer TV (CTV9)	2.8	25	2.5	18	1.7	13	3.5	30	1.6	9	4.2	20	3.4	11	1.2	3	2.7	43	
Apsara TV (TV11)	0.6	5	0.5	4	0.4	3	0.7	6	0.2	1	0.4	2	0.6	2	1.6	4	0.6	9	
Bayon TV (TV27)	19.2	170	15.5	113	15.7	117	19.1	166	15.1	85	16.3	77	18.9	61	23.6	60	17.6	283	
Bayon TV1	1.5	13	0.8	6	0.7	5	1.6	14	0.7	4	1.7	8	0.9	3	1.6	4	1.2	19	
CTN	40.4	357	42.4	309	49.1	365	34.7	301	39.4	222	44.5	210	42.1	136	38.6	98	41.3	666	
My TV	4.3	38	4.8	35	7.3	54	2.2	19	9.6	54	2.3	11	1.2	4	1.6	4	4.5	73	
SEA TV	10.0	88	9.5	69	8.9	66	10.5	91	12.3	69	10.6	50	6.5	21	6.7	17	9.7	157	
Battambang TV	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
French TV (TV5 Asia)	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
Vietnam TV (VTV)	0.1	1	0.0	0	0.1	1	0.0	0	0.0	0	0.0	0	0.0	0	0.4	1	0.1	1	
Satellite TV	1.0	9	0.5	4	0.4	3	1.2	10	0.9	5	0.6	3	0.9	3	0.8	2	0.8	13	
Local Cable TV	2.4	21	3.6	26	5.5	41	0.7	6	2.3	13	4.7	22	2.2	7	2.0	5	2.9	47	
Watched TV, but can't identify	0.6	5	1.4	10	0.4	3	1.4	12	0.7	4	0.2	1	1.9	6	1.6	4	0.9	15	
Others	0.3	3	0.7	5	0.5	4	0.5	4	0.5	3	0.2	1	0.9	3	0.4	1	0.5	8	
Base		884		728		744		868		563		472		323		254		1612	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 88: Do you have access to a mobile phone?
Base: All respondents

	Base	Do you have access to a mobile phone?			
		No		Yes	
		%	#	%	#
All Respondents	2401	9.2	220	90.8	2179
Sex					
Male	1203	8.4	101	91.5	1101
Female	1198	9.9	119	90.0	1078
Residence					
Urban	820	3.7	30	96.3	790
Rural	1581	12.0	190	87.9	1389
Region					
Phnom Penh	200	1.0	2	99.0	198
Plain	676	5.6	38	94.1	636
Tonle Sap	750	9.1	68	90.9	682
Coastal	300	8.3	25	91.7	275
Mountain	475	18.3	87	81.7	388
Ethnicity					
Khmer	2254	7.7	174	92.2	2078
Indigenous people	89	42.7	38	57.3	51
Cham	47	14.9	7	85.1	40
Household Member					
1-3	439	6.8	30	92.9	408
4-6	1404	8.9	125	91.0	1278
7-Over	558	11.6	65	88.4	493
Age					
15-24	787	8.5	67	91.4	719
25-34	712	8.3	59	91.7	653
35-44	495	9.3	46	90.5	448
45-55	407	11.8	48	88.2	359
Education					
No Schooling	257	26.5	68	73.5	189
Primary School	988	11.2	111	88.6	875
Secondary School	682	5.1	35	94.9	647
High School	382	1.6	6	98.4	376
University	92	0.0	0	100.0	92
PPI Index					
Poorest (0-24)	257	28.0	72	72.0	185
Poor (25-49)	942	12.3	116	87.6	825
Medium (50-74)	960	3.1	30	96.8	929
High (75-100)	242	0.8	2	99.2	240
Working Youth					
No	1901	9.3	176	90.7	1724
Yes	500	8.8	44	91.0	455
Landowner					
No	300	9.0	27	91.0	273
Yes	2101	9.2	193	90.7	1906
Occupation					
Farmer	1094	15.7	172	84.1	922
Business person	390	2.1	8	97.9	382
Sales and services	105	1.0	1	99.0	104
Skilled Manual	96	8.3	8	91.7	88
Housework/housewife	142	1.4	2	98.6	140
Teacher	46	0.0	0	100.0	46
University Student	44	0.0	0	100.0	44
Non-university student	250	9.2	23	90.8	227
Professional-technical-management	90	1.1	1	98.9	89
Government official	93	0.0	0	100.0	93
Forestry Worker	5	0.0	0	100.0	5
<i>Coastal fisherman/woman</i>	35	8.6	3	91.4	32
<i>Freshwater fisherman/woman</i>	35	8.6	3	91.4	32

Table 89: Whose phone do you have access to?
Base: Respondents with access to a mobile phone

	Base	Phone booth		Friend		Spouse		My relatives		My neighbours		My own		Other			
		%	#	%	#	%	#	%	#	%	#	%	#	%	#		
All Respondents	2179	23.1	503	7.7	168	13.1	285	29.9	651	5.7	125	60.0	1306	0.4	8		
Sex(*)																	
Male	1101	23.6	260	10.5	116	3.3	36	28.5	314	6.5	72	69.3	763	0.5	5	$X^2=24.98$	$X^2=188.37$
Female	1078	22.5	243	4.8	52	23.1	249	31.3	337	4.9	53	50.4	543	0.3	3	$df=1, p=0.000$	$df=1, p=0.000$
Residence(*)																	
Urban	790	25.3	200	9.4	74	14.6	115	25.8	204	2.2	17	70.0	552	0.8	6	$X^2=4.78$	$X^2=9.72$
Rural	1389	21.8	303	6.8	94	12.2	170	32.2	447	7.8	108	54.3	754	0.1	2	$df=1, p=0.029$	$df=1, p=0.002$
Region(*)																	
Phnom Penh	198	22.2	44	8.1	16	11.6	23	17.2	34	1.0	2	77.3	153	0.0	0	$X^2=43.92$	$X^2=58.36$
Plain	636	17.9	114	6.1	39	10.4	66	23.4	149	5.0	32	62.8	399	0.5	3	$df=4, p=0.000$	$df=4, p=0.000$
Tonle Sap	682	21.8	149	3.1	21	13.9	95	31.4	214	5.1	35	51.8	353	0.0	0	$X^2=21.37$	$X^2=47.88$
Coastal	275	37.8	104	13.5	37	14.9	41	37.5	103	6.5	18	57.5	158	1.1	3	$df=4, p=0.000$	$df=4, p=0.000$
Mountain	388	23.7	92	14.2	55	15.5	60	38.9	151	9.8	38	62.6	243	0.5	2		
Ethnicity (*)																	
Khmer	2078	23.1	481	7.5	156	13.1	273	29.4	610	5.2	109	60.5	1257	0.3	7	$X^2=9.32$	
Indigenous people	51	13.7	7	11.8	6	13.7	7	49.0	25	23.5	12	51.0	26	2.0	1	$df=2, p=0.009$	
Cham	40	30.0	12	15.0	6	10.0	4	32.5	13	7.5	3	45.0	18	0.0	0		
Household Member																	
1-3	408	24.3	99	6.1	25	15.0	61	30.1	123	7.4	30	57.4	234	0.7	3		
4-6	1278	23.1	295	7.7	99	13.7	175	28.4	363	5.3	68	60.6	774	0.3	4		
7-Over	493	22.1	109	8.9	44	9.9	49	33.5	165	5.5	27	60.4	298	0.2	1		
Age(*)																	
15-24	719	23.8	171	14.7	106	8.1	58	41.7	300	5.7	41	56.2	404	0.6	4	$X^2=80.27$	$X^2=25.92$
25-34	653	24.5	160	6.0	39	15.5	101	24.7	161	5.2	34	64.6	422	0.2	1	$df=3, p=0.000$	$df=3, p=0.000$
35-44	448	22.1	99	3.6	16	17.2	77	20.8	93	5.6	25	62.0	277	0.4	2	$X^2=75.85$	$X^2=12.67$
45-55	359	20.3	73	1.9	7	13.6	49	27.0	97	7.0	25	56.5	203	0.3	1	$df=3, p=0.000$	$df=3, p=0.005$
Education(*)																	
No Schooling	189	27.5	52	5.3	10	21.2	40	33.9	64	12.2	23	36.0	68	0.0	0	$X^2=26.10$	$X^2=50.18$
Primary School	875	23.9	209	5.4	47	17.0	149	30.7	269	7.3	64	50.1	438	0.1	1	$df=4, p=0.000$	$df=4, p=0.000$
Secondary School	647	22.6	146	7.9	51	11.0	71	32.6	211	3.7	24	63.8	413	0.3	2	$X^2=30.07$	$X^2=192.07$
High School	376	19.9	75	13.3	50	5.1	19	25.5	96	3.2	12	79.8	300	1.1	4	$df=4, p=0.000$	$df=4, p=0.000$
University	92	22.8	21	10.9	10	6.5	6	12.0	11	2.2	2	94.6	87	1.1	1		
PPI Index(*)																	
Poorest (0-24)	185	34.1	63	8.1	15	5.9	11	39.5	73	14.6	27	34.6	64	0.0	0	$X^2=31.40$	$X^2=10.60$
Poor (25-49)	825	26.8	221	7.6	63	13.6	112	34.3	283	7.8	64	48.4	399	0.0	0	$df=3, p=0.000$	$df=3, p=0.014$
Medium (50-74)	929	18.8	175	8.1	75	13.2	123	26.9	250	3.0	28	68.7	638	0.4	4	$X^2=50.46$	$X^2=189.45$
High (75-100)	240	18.3	44	6.3	15	16.3	39	18.8	45	2.5	6	85.4	205	1.7	4	$df=3, p=0.000$	$df=3, p=0.000$
Working Youth(*)																	
No	1724	23.1	398	6.5	112	13.3	230	27.7	477	5.2	90	60.9	1049	0.3	6	$X^2=17.09$	$X^2=19.21$
Yes	455	23.1	105	12.3	56	12.1	55	38.2	174	7.7	35	56.5	257	0.4	2	$df=1, p=0.000$	$df=1, p=0.000$
Landowner																	
No	273	25.6	70	6.6	18	10.3	28	27.8	76	6.6	18	57.7	157	0.0	0		
Yes	1906	22.7	433	7.9	150	13.5	257	30.2	575	5.6	107	60.3	1149	0.4	8		
Occupation(*)																	
Farmer	922	25.3	233	6.3	58	14.8	136	33.3	307	9.8	90	47.7	440	0.1	1	$X^2=127.11$	
Business person	382	19.1	73	3.4	13	19.1	73	19.9	76	2.1	8	71.5	273	0.0	0	$df=12$	
Sales and services	104	20.2	21	6.7	7	4.8	5	25.0	26	2.9	3	75.0	78	0.0	0	$P=0.000(My\ relative)$	
Skilled Manual	88	28.4	25	8.0	7	14.8	13	22.7	20	2.3	2	63.6	56	0.0	0	$X^2=205.73$	
Housework/housewife	140	22.9	32	2.1	3	27.1	38	25.7	36	2.9	4	57.6	80	0.0	0	$df=12$	
Teacher	46	28.3	13	10.9	5	13.0	6	28.3	13	10.9	5	84.8	39	4.3	2	$P=0.000(My\ neighbour)$	
University Student	44	29.5	13	15.9	7	0.0	0	11.4	5	2.3	1	90.9	40	0.0	0		
Non-university student	227	24.2	55	19.8	45	1.3	3	53.7	122	2.2	5	50.2	114	0.9	2		
Professional-technical-management	89	18.0	16	7.9	7	3.4	3	18.0	16	4.5	4	86.5	77	0.0	0		
Government official	93	15.1	14	7.5	7	5.4	5	8.6	8	1.1	1	94.6	88	3.2	3		
Forestry Worker	5	0.0	0	40.0	2	0.0	0	40.0	2	20.0	1	80.0	4	0.0	0		
Coastal fisherman/woman	32	28.1	9	15.6	5	3.1	1	37.5	12	3.1	1	50.0	16	0.0	0		
Freshwater fisherman/woman	32	18.8	6	12.5	4	6.2	2	43.8	14	6.2	2	43.8	14	0.0	0		

Note:
 A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
 Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 90: Which network/mobile phone company do you use?
Base: Respondents with own phone

	Base	Mobitel (012, 017, 092, 089, 077)		Camshin (011or 099)		Hello (015 or 016)		StarCell (098)		qb or CADCOMMS (013)		Met phone (097)		Smart mobile (010 & 093)		Beeline (090, 067, 068)		Other	
		%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
All Respondents	1306	51.5	672	17.1	223	6.8	89	1.5	20	0.5	7	51.5	672	2.0	26	4.4	57	0.2	2
Sex(*)																			
Male	763	54.8	418	17.2	131	7.1	54	0.5	4	0.7	5	52.2	398	2.1	16	4.7	36	0.1	1
Female	543	46.8	254	16.9	92	6.4	35	2.9	16	0.4	2	50.5	274	1.8	10	3.9	21	0.2	1
Residence(*)																			
Urban	552	52.5	290	18.7	103	8.9	49	2.4	13	0.5	3	52.2	288	3.3	18	6.9	38	0.4	2
Rural	754	50.7	382	15.9	120	5.3	40	0.9	7	0.5	4	50.9	384	1.1	8	2.5	19	0.0	0
Region(*)																			
Phnom Penh	153	62.1	95	17.0	26	10.5	16	2.0	3	0.0	0	39.2	60	5.2	8	3.9	6	0.0	0
Plain	399	59.9	239	19.0	76	4.5	18	1.8	7	1.0	4	45.4	181	2.0	8	9.5	38	0.5	2
Tonle Sap	353	61.8	218	7.9	28	4.5	16	2.5	9	0.3	1	48.2	170	2.3	8	1.4	5	0.0	0
Coastal	158	27.8	44	17.1	27	17.1	27	0.6	1	0.6	1	62.0	98	0.6	1	5.1	8	0.0	0
Mountain	243	31.3	76	27.2	66	4.9	12	0.0	0	0.4	1	67.1	163	0.4	1	0.0	0	0.0	0
Ethnicity (*)																			
Khmer	1257	52.1	655	17.0	214	6.9	87	1.6	20	0.5	6	51.1	642	2.0	25	4.5	57	0.2	2
Indigenous people	26	19.2	5	23.1	6	0.0	0	0.0	0	3.8	1	73.1	19	0.0	0	0.0	0	0.0	0
Cham	18	50.0	9	16.7	3	11.1	2	0.0	0	0.0	0	50.0	9	5.6	1	0.0	0	0.0	0
Household Member (*)																			
1-3	234	51.7	121	19.7	46	6.0	14	3.0	7	0.9	2	52.6	123	3.4	8	3.0	7	0.0	0
4-6	774	52.1	403	15.8	122	6.7	52	1.0	8	0.3	2	50.4	390	1.0	8	4.7	36	0.0	0
7-Over	298	49.7	148	18.5	55	7.7	23	1.7	5	1.0	3	53.4	159	3.4	10	4.7	14	0.7	2
Age(*)																			
15-24	404	39.4	159	15.1	61	5.4	22	3.5	14	1.2	5	62.4	252	3.7	15	9.2	37	0.2	1
25-34	422	56.2	237	17.1	72	9.0	38	1.2	5	0.5	2	54.0	228	2.1	9	3.6	15	0.2	1
35-44	277	57.8	160	21.7	60	4.7	13	0.0	0	0.0	0	40.8	113	0.0	0	1.4	4	0.0	0
45-55	203	57.1	116	14.8	30	7.9	16	0.5	1	0.0	0	38.9	79	1.0	2	0.5	1	0.0	0
Education(*)																			
No Schooling	68	41.2	28	14.7	10	7.4	5	0.0	0	0.0	0	51.5	35	0.0	0	2.9	2	0.0	0
Primary School	438	48.4	212	18.3	80	5.7	25	0.2	1	0.2	1	45.2	198	1.1	5	1.8	8	0.0	0
Secondary School	413	55.2	228	15.7	65	6.8	28	1.2	5	1.0	4	52.1	215	1.9	8	3.1	13	0.2	1
High School	300	48.0	144	15.0	45	6.7	20	3.3	10	0.3	1	62.0	186	1.7	5	9.0	27	0.3	1
University	87	69.0	60	26.4	23	12.6	11	4.6	4	1.1	1	43.7	38	9.2	8	8.0	7	0.0	0
PPI Index(*)																			
Poorest (0-24)	64	25.0	16	12.5	8	3.1	2	0.0	0	0.0	0	68.8	44	0.0	0	3.1	2	0.0	0
Poor (25-49)	399	45.1	180	17.3	69	4.5	18	0.5	2	0.3	1	53.1	212	1.0	4	2.5	10	0.0	0
Medium (50-74)	638	55.2	352	16.1	103	7.5	48	1.7	11	0.9	6	49.4	315	2.2	14	5.6	36	0.3	2
High (75-100)	205	60.5	124	21.0	43	10.2	21	3.4	7	0.0	0	49.3	101	3.9	8	4.4	9	0.0	0
Working Youth(*)																			
No	1049	53.8	564	17.3	181	7.1	75	1.4	15	0.5	5	49.3	517	1.8	19	4.1	43	0.2	2
Yes	257	42.0	108	16.3	42	5.4	14	1.9	5	0.8	2	60.3	155	2.7	7	5.4	14	0.0	0
Landowner																			
No	157	51.6	81	19.1	30	7.0	11	1.3	2	0.6	1	50.3	79	2.5	4	4.5	7	0.0	0
Yes	1149	51.4	591	16.8	193	6.8	78	1.6	18	0.5	6	51.6	593	1.9	22	4.4	50	0.2	2
Occupation(*)																			
Farmer	440	47.7	210	14.8	65	4.3	19	0.0	0	0.5	2	52.0	229	0.2	1	1.6	7	0.0	0
Business person	273	54.6	149	17.9	49	9.9	27	1.5	4	0.4	1	51.6	141	2.2	6	2.9	8	0.4	1
Sales and services	78	64.1	50	10.3	8	6.4	5	1.3	1	0.0	0	39.7	31	3.8	3	2.6	2	0.0	0
Skilled Manual	56	50.0	28	19.6	11	8.9	5	3.6	2	0.0	0	50.0	28	5.4	3	5.4	3	0.0	0
Housework/housewife	80	47.5	38	21.3	17	8.8	7	1.3	1	0.0	0	40.0	32	1.3	1	2.5	2	0.0	0
Teacher	39	56.4	22	23.1	9	5.1	2	2.6	1	0.0	0	66.7	26	0.0	0	10.3	4	0.0	0
University Student	40	60.0	24	17.5	7	7.5	3	5.0	2	0.0	0	47.5	19	10.0	4	12.5	5	0.0	0
Non-university student	114	28.1	32	11.4	13	4.4	5	6.1	7	2.6	3	70.2	80	4.4	5	15.8	18	0.9	1
Professional-technical-management	77	67.5	52	23.4	18	5.2	4	1.3	1	1.3	1	41.6	32	3.9	3	6.5	5	0.0	0
Government official	88	65.9	58	22.7	20	8.0	7	1.1	1	0.0	0	51.1	45	0.0	0	3.4	3	0.0	0
Forestry Worker	4	25.0	1	25.0	1	25.0	1	0.0	0	0.0	0	75.0	3	0.0	0	0.0	0	0.0	0
Coastal fisherman/woman	16	12.5	2	25.0	4	31.3	5	0.0	0	0.0	0	62.5	10	0.0	0	0.0	0	0.0	0
Freshwater fisherman/woman	14	78.6	11	21.4	3	0.0	0	0.0	0	0.0	0	50.0	7	0.0	0	0.0	0	0.0	0

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

Table 91: Mobile functions used (Frequency Table)
Base: Respondents with own phone

	%	#
Making / receiving calls	100.0	1304
Listening to music	60.3	787
Ring tones	49.7	649
Taking photographs	47.2	617
Sending and receiving SMS	44.8	585
Playing games	39.1	510
Call tunes	32.6	426
Listening to radio	32.5	425
Recording audio	28.9	377
Using internet	4.8	63
Base		1306

Table 92: Mobile functions used
Base: Respondents with own phone

	Base	Sending and receiving SMS		Ring tones		Call tunes		Playing games		Recording audio		Listening to music		Listening to radio		Take photographs	
		%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
All Respondents	1306	44.8	585	49.7	649	32.6	426	39.1	510	28.9	377	60.3	787	32.5	425	47.2	617
Sex																	
Male	763	47.2	360	50.7	386	32.2	245	41.1	313	29.8	227	61.7	470	35.7	272	48.4	369
Female	543	41.4	225	48.4	263	33.3	181	36.3	197	27.6	150	58.4	317	28.2	153	45.7	248
Residence																	
Urban	552	53.6	296	53.4	294	34.5	190	42.6	235	33.9	187	63.3	349	39.0	215	55.5	306
Rural	754	38.3	289	47.1	355	31.3	236	36.5	275	25.2	190	58.1	438	27.9	210	41.2	311
Region																	
Phnom Penh	153	60.8	93	48.4	74	33.3	51	39.2	60	28.8	44	51.6	79	45.8	70	58.8	90
Plain	399	40.6	162	46.7	186	37.4	149	39.9	159	30.2	120	59.5	237	36.9	147	47.0	187
Tonle Sap	353	35.1	124	41.1	145	21.5	76	30.0	106	22.4	79	55.8	197	27.2	96	39.1	138
Coastal	158	51.3	81	69.0	109	39.9	63	50.0	79	41.8	66	77.8	123	44.3	70	57.0	90
Mountain	243	51.4	125	55.6	135	35.8	87	43.6	106	28.0	68	62.1	151	17.3	42	46.1	112
Ethnicity(*)																	
Khmer	1256	44.7	562	50.1	629	32.9	409	39.3	494	29.4	369	60.8	764	33.4	419	47.9	601
Indigenous people	26	57.7	15	53.8	14	44.0	11	34.6	9	11.5	3	53.8	14	0.0	0	38.5	10
Cham	18	33.3	6	27.8	5	27.8	5	33.3	6	22.2	4	38.9	7	33.3	6	27.8	5
Family Member(*)																	
1-3	234	44.9	105	55.6	130	30.4	70	42.7	100	24.9	58	61.1	143	32.2	75	45.5	106
4-6	773	42.4	328	46.2	357	32.1	245	36.2	280	29.3	226	59.0	456	30.3	234	46.3	358
7-Over	298	51.0	152	54.4	162	37.5	111	43.6	130	31.2	93	63.1	188	38.9	116	51.3	153
Age																	
15-24	404	69.3	280	64.5	260	47.6	192	65.8	265	43.4	175	77.2	311	46.7	188	64.0	258
25-34	422	45.3	191	55.9	236	35.5	150	44.5	188	34.6	146	66.8	282	37.0	156	54.7	231
35-44	277	28.2	78	39.7	110	19.1	53	15.9	44	14.8	41	47.3	131	19.9	55	32.9	91
45-55	203	17.7	36	21.2	43	15.3	31	6.4	13	7.4	15	31.0	63	12.8	26	18.2	37
Education																	
No Schooling	68	32.4	22	36.8	25	19.1	13	20.6	14	19.1	13	45.6	31	14.7	10	35.3	24
Primary School	438	23.5	103	42.1	184	24.0	105	27.7	121	16.9	74	53.8	235	21.1	92	34.6	151
Secondary School	413	43.8	181	46.0	190	34.9	144	36.3	150	29.8	123	58.1	240	32.2	133	47.0	194
High School	300	66.3	199	62.0	186	40.7	122	56.0	168	37.3	112	72.0	216	44.3	133	60.0	180
University	87	92.0	80	73.6	64	48.3	42	65.5	57	63.2	55	74.7	65	65.5	57	78.2	68
PPI Index																	
Poorest (0-24)	64	42.2	27	53.1	34	32.8	21	34.4	22	20.3	13	67.2	43	21.9	14	37.5	24
Poor (25-49)	399	33.1	132	42.2	168	26.6	106	35.4	141	22.1	88	57.3	228	25.9	103	37.4	149
Medium (50-74)	638	49.2	314	52.4	334	36.1	230	41.8	267	32.0	204	61.6	393	36.7	234	50.8	324
High (75-100)	205	54.6	112	55.1	113	33.7	69	39.0	80	35.1	72	60.0	123	36.1	74	58.5	120
Working Youth																	
No	1049	41.3	433	47.1	494	30.3	318	33.4	350	26.3	276	57.0	598	30.0	315	43.8	459
Yes	257	59.1	152	60.5	155	42.2	108	62.5	160	39.5	101	73.8	189	43.0	110	61.7	158
Landowner																	
No	157	52.2	82	49.0	77	32.5	51	45.9	72	30.6	48	58.0	91	32.5	51	48.4	76
Yes	1149	43.8	503	49.8	572	32.7	375	38.2	438	28.7	329	60.6	696	32.6	374	47.1	541
Occupation																	
Farmer	439	27.7	122	42.4	186	27.1	119	29.4	129	21.9	96	56.0	246	24.4	107	36.2	159
Business person	273	38.5	105	49.1	134	28.9	79	38.5	105	22.7	62	52.7	144	24.5	67	42.9	117
Sales and services	78	51.3	40	50.0	39	29.5	23	39.7	31	33.3	26	64.1	50	39.7	31	50.0	39
Skilled Manual	56	58.9	33	57.1	32	39.3	22	48.2	27	39.3	22	71.4	40	57.1	32	62.5	35
Housework/housewife	80	36.3	29	42.5	34	30.0	24	32.5	26	30.0	24	52.5	42	31.3	25	55.0	44
Teacher	39	66.7	26	61.5	24	28.2	11	53.8	21	41.0	16	71.8	28	41.0	16	69.2	27
University Student	40	95.0	38	75.0	30	57.5	23	77.5	31	60.0	24	82.5	33	75.0	30	80.0	32
Non-university student	114	84.2	96	70.2	80	56.1	64	70.2	80	47.4	54	83.3	95	46.5	53	64.0	73
Professional-technical-management	77	58.4	45	51.9	40	35.1	27	45.5	35	28.6	22	74.0	57	39.0	30	55.8	43
Government official	88	52.3	46	44.3	39	29.5	26	22.7	20	29.5	26	47.7	42	33.0	29	44.3	39
Forestry Worker	4	25.0	1	75.0	3	50.0	2	25.0	1	25.0	1	50.0	2	0.0	0	50.0	2
<i>Coastal fisherman/woman</i>	16	43.8	7	62.5	10	43.8	7	37.5	6	43.8	7	50.0	8	31.3	5	56.3	9
<i>Freshwater fisherman/woman</i>	14	7.1	1	42.9	6	28.6	4	7.1	1	21.4	3	64.3	9	21.4	3	35.7	5

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 93: What kind of message do you use?
Base: Respondents who use SMS

	Sending and receiving SMS																	
	Sex				Residence				Age						Total			
	Male		Female		Urban		Rural		15-24		25-34		35-44				45-55	
%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	
sms in Khmer	23.3	84	23.6	53	16.2	48	30.8	89	28.9	81	17.3	33	21.8	17	16.7	6	23.4	137
sms in voice	4.4	16	3.1	7	6.4	19	1.4	4	4.3	12	5.2	10	0.0	0	2.8	1	3.9	23
video message	2.5	9	0.9	2	2.7	8	1.0	3	2.9	8	1.0	2	0.0	0	2.8	1	1.9	11
sms in English	83.1	299	79.1	178	91.6	271	71.3	206	84.6	237	79.6	152	75.6	59	80.6	29	81.5	477
sms in template	41.9	151	33.3	75	40.9	121	36.3	105	39.3	110	47.6	91	23.1	18	19.4	7	38.6	226
others	0.8	3	0.0	0	0.3	1	0.7	2	0.4	1	0.5	1	1.3	1	0.0	0	0.5	3
		360		225		296		289		280		191		78		36		585

Table 94: When was the last time you used the Internet?
Base: All respondents

	When was the last time you used the internet?											
	Base	Today/yesterday		In past week		In the past month		In past year		Never		
		%	#	%	#	%	#	%	#	%		#
All respondents	2401	1.6	38	1.3	31	1.0	25	1.6	39	94.5	2268	
Sex(*)												
Male	1203	2.7	32	2.0	24	1.2	15	2.2	26	91.9	1106	$\chi^2=33.82$ $df=4, p=0.000$
Female	1198	0.5	6	0.6	7	0.8	10	1.1	13	97.0	1162	
Residence(*)												
Urban	820	3.7	30	2.4	20	2.7	22	3.5	29	87.7	719	$\chi^2=112.94$ $df=4, p=0.000$
Rural	1581	0.5	8	0.7	11	0.2	3	0.6	10	98.0	1549	
Region												
Phnom Penh	200	6.0	12	3.0	6	2.0	4	1.0	2	88.0	176	
Plain	676	1.3	9	0.9	6	1.5	10	2.2	15	94.1	636	
Tonle Sap	750	1.5	11	1.5	11	0.5	4	1.6	12	94.9	712	
Coastal	300	0.3	1	1.0	3	1.0	3	2.0	6	95.7	287	
Mountain	475	1.1	5	1.1	5	0.8	4	0.8	4	96.2	457	
Age(*)												
15-24	787	2.2	17	2.2	17	1.9	15	3.6	28	90.2	710	$\chi^2=56.60$ $df=12, p=0.000$
25-34	712	1.8	13	1.3	9	1.0	7	1.3	9	94.7	674	
35-44	495	1.0	5	0.6	3	0.6	3	0.4	2	97.4	482	
45-55	407	0.7	3	0.5	2	0.0	0	0.0	0	98.8	402	
Education												
No Schooling	257	0.0	0	0.0	0	0.0	0	0.0	0	100.0	257	
Primary School	988	0.1	1	0.1	1	0.0	0	0.2	2	99.6	984	
Secondary School	682	1.2	8	0.7	5	0.6	4	0.9	6	96.6	659	
High School	382	2.9	11	1.6	6	2.6	10	6.0	23	86.9	332	
University	92	19.6	18	20.7	19	12.0	11	8.7	8	39.1	36	
PPI Index												
Poorest (0-24)	257	0.0	0	0.0	0	0.0	0	0.4	1	99.6	256	
Poor (25-49)	942	0.3	3	0.5	5	0.2	2	0.4	4	98.5	928	
Medium (50-74)	960	2.2	21	1.5	14	1.8	17	2.4	23	92.2	885	
High (75-100)	242	5.8	14	5.0	12	2.5	6	4.5	11	82.2	199	
Working Youth												
No	1901	1.8	35	1.3	25	1.1	21	1.4	26	94.4	1794	
Yes	500	0.6	3	1.2	6	0.8	4	2.6	13	94.8	474	
Landowner												
No	300	1.0	3	1.3	4	0.7	2	0.7	2	96.3	289	
Yes	2101	1.7	35	1.3	27	1.1	23	1.8	37	94.2	1979	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

**Table 95: What do you use the Internet for?
Base: Internet users**

	Base	Gathering information		Reading news		E-mailing		Searching music/songs		Films, songs, music		
		%	#	%	#	%	#	%	#	%	#	
All Respondents	145	73.1	106	64.8	94	56.6	82	46.2	67	42.1	61	
Sex(*)												
Male	102	77.5	79	66.7	68	51.0	52	46.1	47	48.0	49	$\chi^2=6.82$ $\chi^2=10.58$ $df=2, P=0.033$ $df=2, P=0.005$
Female	43	62.8	27	60.5	26	69.8	30	46.5	20	27.9	12	
Residence												
Urban	112	71.4	80	65.2	73	58.9	66	46.4	52	38.4	43	
Rural	33	78.8	26	63.6	21	48.5	16	45.5	15	54.5	18	
Region												
Phnom Penh	26	76.9	20	53.8	14	34.6	9	42.3	11	42.3	11	
Plain	45	73.3	33	68.9	31	60.0	27	44.4	20	42.2	19	
Tonle Sap	41	61.0	25	56.1	23	68.3	28	41.5	17	34.1	14	
Coastal	14	92.9	13	71.4	10	42.9	6	42.9	6	64.3	9	
Mountain	19	78.9	15	84.2	16	63.2	12	68.4	13	42.1	8	
Ethnicity												
Khmer	141	74.5	105	66.7	94	58.2	82	46.1	65	41.8	59	
Indigenous people	1	0.0	0	0.0	0	0.0	0	100.0	1	100.0	1	
Cham	1	100.0	1	0.0	0	0.0	0	100.0	1	100.0	1	
Household Member												
1-3	25	72.0	18	64.0	16	52.0	13	48.0	12	40.0	10	
4-6	76	72.4	55	64.5	49	56.6	43	47.4	36	43.4	33	
7-Over	42	78.6	33	69.0	29	61.9	26	45.2	19	42.9	18	
Age(*)												
15-24	82	68.3	56	61.0	50	54.9	45	61.0	50	52.4	43	$\chi^2=22.94$ $\chi^2=19.71$ $df=6$ $df=6$ $P=0.001$ $P=0.003$
25-34	43	76.7	33	72.1	31	58.1	25	30.2	13	30.2	13	
35-44	15	80.0	12	60.0	9	53.3	8	20.0	3	20.0	3	
45-55	5	100.0	5	80.0	4	80.0	4	20.0	1	40.0	2	
Education(*)												
No Schooling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	$\chi^2=28.80$ $\chi^2=14.32$ $df=6$ $df=6$ $P=0.000$ $P=0.026$
Primary School	4	100.0	4	50.0	2	75.0	3	0.0	0	0.0	0	
Secondary School	26	50.0	13	46.2	12	26.9	7	50.0	13	50.0	13	
High School	56	62.5	35	64.3	36	48.2	27	57.1	32	46.4	26	
University	59	91.5	54	74.6	44	76.3	45	37.3	22	37.3	22	
PPI Index												
Poorest (0-24)	1	100.0	1	100.0	1	0.0	0	100.0	1	100.0	1	
Poor (25-49)	15	80.0	12	73.3	11	53.3	8	46.7	7	53.3	8	
Medium (50-74)	84	72.6	61	65.5	55	61.9	52	46.4	39	38.1	32	
High (75-100)	45	71.1	32	60.0	27	48.9	22	44.4	20	44.4	20	
Working Youth(*)												
No	117	76.1	89	69.2	81	56.4	66	44.4	52	41.0	48	$\chi^2=6.30$ $df=2, P=0.043$
Yes	28	60.7	17	46.4	13	57.1	16	53.6	15	46.4	13	
Landowner												
No	11	72.7	8	63.6	7	45.5	5	45.5	5	63.6	7	
Yes	134	73.1	98	64.9	87	57.5	77	46.3	62	40.3	54	
Occupation												
Farmer	20	100.0	4	75.0	3	50.0	2	50.0	2	75.0	3	
Business person	80	62.5	10	62.5	10	56.3	9	43.8	7	31.3	5	
Sales and services	25	60.0	3	80.0	4	40.0	2	40.0	2	20.0	1	
Skilled Manual	40	37.5	3	37.5	3	50.0	4	37.5	3	50.0	4	
Housework/housewife	20	75.0	3	75.0	3	75.0	3	25.0	1	0.0	0	
Teacher	60	91.7	11	75.0	9	83.3	10	33.3	4	33.3	4	
University Student	130	92.3	24	76.9	20	73.1	19	61.5	16	46.2	12	
Non-university student	165	60.6	20	57.6	19	36.4	12	63.6	21	60.6	20	
Professional-technical-management	75	73.3	11	66.7	10	66.7	10	33.3	5	26.7	4	
Government official	100	85.0	17	65.0	13	55.0	11	30.0	6	40.0	8	
<i>Coastal fisherman/woman</i>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
<i>Freshwater fisherman/woman</i>	5	100.0	1	0.0	0	100.0	1	100.0	1	100.0	1	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 96: Where do you use the Internet?
Base: Internet users

	Base	At office		At internet café		At home (landline)		Wi Fi		Other		
		%	#	%	#	%	#	%	#	%	#	
All Respondents	145	26.2	38	58.6	85	19.3	28	1.4	2	23.4	34	
Sex												
Male	102	25.5	26	61.8	63	20.6	21	1.0	1	24.5	25	
Female	43	27.9	12	51.2	22	16.3	7	2.3	1	20.9	9	
Residence(*)												
Urban	112	25.9	29	65.2	73	17.9	20	1.8	2	20.5	23	$\chi^2=8.72$ $df=1, P=0.003$
Rural	33	27.3	9	36.4	12	24.2	8	0.0	0	33.3	11	
Region												
Phnom Penh	26	26.9	7	65.4	17	30.8	8	0.0	0	19.2	5	
Plain	45	28.9	13	64.4	29	15.6	7	2.2	1	28.9	13	
Tonle Sap	41	14.6	6	65.9	27	17.1	7	2.4	1	12.2	5	
Coastal	14	21.4	3	35.7	5	0.0	0	0.0	0	50.0	7	
Mountain	19	47.4	9	36.8	7	31.6	6	0.0	0	21.1	4	
Ethnicity												
Khmer	143	26.6	38	59.4	85	18.9	27	1.4	2	23.1	33	
Indigenous people	1	0.0	0	0.0	0	0.0	0	0.0	0	100.0	1	
Cham	1	0.0	0	0.0	0	100.0	1	0.0	0	0.0	0	
Household Member												
1-3	26	23.1	6	61.5	16	23.1	6	0.0	0	30.8	8	
4-6	76	28.9	22	53.9	41	22.4	17	2.6	2	22.4	17	
7-Over	43	23.3	10	65.1	28	11.6	5	0.0	0	20.9	9	
Age(*)												
15-24	82	13.4	11	62.2	51	17.1	14	2.4	2	30.5	25	$\chi^2=20.42$ $\chi^2=8.54$ $df=3$ $df=3$ $P=0.000$ $P=0.036$
25-34	43	34.9	15	58.1	25	23.3	10	0.0	0	20.9	9	
35-44	15	60.0	9	53.3	8	13.3	2	0.0	0	0.0	0	
45-55	5	60.0	3	20.0	1	40.0	2	0.0	0	0.0	0	
Education(*)												
No Schooling	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	$\chi^2=13.84$ $df=3$ $P=0.003$
Primary School	4	25.0	1	0.0	0	50.0	2	0.0	0	25.0	1	
Secondary School	26	11.5	3	57.7	15	26.9	7	0.0	0	11.5	3	
High School	56	16.1	9	62.5	35	17.9	10	0.0	0	26.8	15	
University	59	42.4	25	59.3	35	15.3	9	3.4	2	25.4	15	
PPI Index(*)												
Poorest (0-24)	1	0.0	0	0.0	0	0.0	0	0.0	0	100.0	1	$\chi^2=8.81$ $df=3$ $P=0.032$
Poor (25-49)	15	26.7	4	46.7	7	6.7	1	0.0	0	33.3	5	
Medium (50-74)	84	26.2	22	57.1	48	14.3	12	2.4	2	26.2	22	
High (75-100)	45	26.7	12	66.7	30	33.3	15	0.0	0	13.3	6	
Working Youth												
No	117	26.5	31	62.4	73	20.5	24	0.9	1	23.1	27	
Yes	28	25.0	7	42.9	12	14.3	4	3.6	1	25.0	7	
Landowner												
No	11	45.5	5	45.5	5	18.2	2	0.0	0	18.2	2	
Yes	134	24.6	33	59.7	80	19.4	26	1.5	2	23.9	32	
Occupation												
Farmer	4	50.0	2	0.0	0	0.0	0	0.0	0	50.0	2	
Business person	17	5.9	1	70.6	12	23.5	4	0.0	0	5.9	1	
Sales and services	5	20.0	1	60.0	3	40.0	2	0.0	0	20.0	1	
Skilled Manual	8	12.5	1	50.0	4	12.5	1	0.0	0	37.5	3	
Housework/housewife	4	25.0	1	0.0	0	0.0	0	0.0	0	75.0	3	
Teacher	12	33.3	4	75.0	9	16.7	2	0.0	0	25.0	3	
University Student	26	19.2	5	73.1	19	19.2	5	3.8	1	38.5	10	
Non-university student	33	0.0	0	75.8	25	18.2	6	0.0	0	27.3	9	
Professional-technical-management	16	50.0	8	37.5	6	31.3	5	6.3	1	12.5	2	
Government official	20	75.0	15	35.0	7	15.0	3	0.0	0	0.0	0	
<i>Coastal fisherman/woman</i>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
<i>Freshwater fisherman/woman</i>	1	0.0	0	0.0	0	100.0	1	0.0	0	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 97: When was the last time you watched a VCD/DVD?
Base: All respondents

	Base	When was the last time you watched VCD/DVD?										All respondents who watched VCD/DVD within the past month		
		Today/yesterday		In past week		In the past month		In past year		Never		VCD/DVD viewer		
		%	#	%	#	%	#	%	#	%	#	%	#	
All Respondents	2401	32.8	788	15.6	374	10.0	239	16.9	405	24.8	595	58.4	1401	
Sex(*)														
Male	1203	34.8	419	18.5	223	10.6	128	15.3	184	20.7	249	64.0	770	$X^2=37.42$
Female	1198	30.8	369	12.6	151	9.3	111	18.4	221	28.9	346	52.7	631	$X^2=31.73$ $df=4, P=0.000$
Residence(*)														
Urban	820	30.2	248	17.1	140	11.1	91	18.8	154	22.8	187	58.4	479	$X^2=10.60$
Rural	1581	34.2	540	14.8	234	9.4	148	15.9	251	25.8	408	58.3	922	$df=4, P=0.031$
Region(*)														
Phnom Penh	200	23.0	46	32.5	65	17.5	35	17.5	35	9.5	19	73.0	146	$X^2=154.13$
Plain	676	30.2	204	17.5	118	9.8	66	16.0	108	26.6	180	57.4	388	$df=16$
Tonle Sap	750	32.1	241	10.3	77	9.7	73	18.9	142	28.9	217	52.1	391	$P=0.000$
Coastal	300	47.7	143	15.3	46	9.7	29	16.7	50	10.7	32	72.7	218	$P=0.000$
Mountain	475	32.4	154	14.3	68	7.6	36	14.7	70	30.9	147	54.3	258	
Ethnicity(*)														
Khmer	2254	32.7	737	15.7	355	10.1	228	17.3	389	24.2	545	58.6	1320	$X^2=16.15$
Indigenous people	89	31.5	28	11.2	10	7.9	7	10.1	9	39.3	35	50.6	45	$df=8, p=0.040$
Cham	47	42.6	20	17.0	8	6.4	3	8.5	4	25.5	12	66.0	31	
Household Member														
1-3	439	31.0	136	15.7	69	7.5	33	18.5	81	27.3	120	54.2	238	
4-6	1404	32.8	460	15.5	217	10.3	145	16.7	234	24.8	348	58.5	822	
7-Over	558	34.4	192	15.8	88	10.9	61	16.1	90	22.8	127	61.1	341	
Age(*)														
15-24	787	41.8	329	17.2	135	10.0	79	15.5	122	15.5	122	69.0	543	$X^2=105.97$
25-34	712	30.8	219	17.3	123	11.4	81	17.7	126	22.9	163	59.4	423	$df=12$
35-44	495	28.1	139	12.9	64	9.3	46	16.2	80	33.5	166	50.3	249	$P=0.000$
45-55	407	24.8	101	12.8	52	8.1	33	18.9	77	35.4	144	45.7	186	$P=0.000$
Education(*)														
No Schooling	257	26.5	68	12.1	31	8.9	23	12.5	32	40.1	103	47.5	122	$X^2=78.15$
Primary School	988	31.8	314	13.3	131	9.2	91	18.4	182	27.3	270	54.3	536	$df=16$
Secondary School	682	34.9	238	17.7	121	10.1	69	16.6	113	20.7	141	62.8	428	$P=0.000$
High School	382	38.5	147	17.8	68	11.3	43	14.9	57	17.5	67	67.5	258	$P=0.000$
University	92	22.8	21	25.0	23	14.1	13	22.8	21	15.2	14	62.0	57	
PPI Index(*)														
Poorest (0-24)	257	24.9	64	12.5	32	12.8	33	14.4	37	35.4	91	50.2	129	$X^2=41.21$
Poor (25-49)	942	35.0	330	13.8	130	9.7	91	15.6	147	25.9	244	58.5	551	$df=12$
Medium (50-74)	960	32.7	314	17.4	167	10.5	101	17.9	172	21.5	206	60.6	582	$df=3$
High (75-100)	242	33.1	80	18.6	45	5.8	14	20.2	49	22.3	54	57.4	139	$P=0.000$
Working Youth(*)														
No	1901	30.1	572	15.8	300	10.1	192	17.5	332	26.6	505	56.0	1064	$X^2=34.81$
Yes	500	43.2	216	14.8	74	9.4	47	14.6	73	18.0	90	67.4	337	$df=4, P=0.000$
Landowner														
No	300	33.3	100	18.3	55	9.0	27	13.7	41	25.7	77	60.7	182	
Yes	2101	32.7	688	15.2	319	10.1	212	17.3	364	24.7	518	58.0	1219	
Occupation(*)														
Farmer	1096	31.9	350	12.3	135	9.4	103	16.9	185	29.5	323	53.6	588	$X^2=57.38$
Business person	390	32.3	126	16.7	65	8.7	34	16.2	63	26.2	102	57.7	225	$df=12$
Sales and services	105	38.1	40	23.8	25	7.6	8	14.3	15	16.2	17	69.5	73	$P=0.000$
Skilled Manual	96	36.5	35	19.8	19	11.5	11	17.7	17	14.6	14	67.7	65	
Housework/housewife	142	24.6	35	16.2	23	10.6	15	20.4	29	28.2	40	51.4	73	
Teacher	46	41.3	19	17.4	8	13.0	6	17.4	8	10.9	5	71.7	33	
University Student	44	29.5	13	22.7	10	6.8	3	27.3	12	13.6	6	59.1	26	
Non-university student	250	40.4	101	20.8	52	12.4	31	16.0	40	10.4	26	73.6	184	
Professional-technical-management	90	26.7	24	13.3	12	14.4	13	15.6	14	30.0	27	54.4	49	
Government official	93	28.0	26	22.6	21	7.5	7	11.8	11	30.1	28	58.1	54	
Forestry Worker	5	80.0	4	0.0	0	0.0	0	0.0	0	20.0	1	80.0	4	
Coastal fisherman/woman	35	54.3	19	14.3	5	11.4	4	11.4	4	8.6	3	80.0	28	
Freshwater fisherman/woman	35	37.1	13	8.6	3	14.3	5	28.6	10	11.4	4	60.0	21	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 98: Which programmes do you usually watch?

Base: VCD/DVD viewers

	Base	Movie series		Comedy		Cartoon		Songs		Health education		Other		
		%	#	%	#	%	#	%	#	%	#	%	#	
All Respondents	1401	89.4	1252	35.2	493	6.4	90	70.6	989	0.9	13	2.1	29	
Sex(*)														
Male	770	88.7	683	42.7	329	4.3	33	74.0	570	1.0	8	1.7	13	$X^2=42.59$ $df=1, P=0.000$
Female	631	90.2	569	26.0	164	9.0	57	66.4	419	0.8	5	2.5	16	
Residence(*)														
Urban	479	82.7	396	36.1	173	10.6	51	74.3	356	1.7	8	3.3	16	$X^2=34.30$ $df=1, P=0.000$
Rural	922	92.8	856	34.7	320	4.2	39	68.7	633	0.5	5	1.4	13	
Region(*)														
Phnom Penh	146	94.5	138	48.6	71	12.3	18	70.5	103	1.4	2	0.7	1	$X^2=11.77$ $df=4$
Plain	388	87.9	341	36.6	142	5.2	20	70.6	274	0.5	2	2.6	10	
Tonle Sap	391	86.2	337	15.3	60	2.6	10	58.6	229	1.0	4	3.3	13	$P=0.019$
Coastal	218	92.2	201	59.6	130	6.4	14	83.9	183	0.9	2	1.4	3	
Mountain	258	91.1	235	34.9	90	10.9	28	77.5	200	1.2	3	0.8	2	
Ethnicity(*)														
Khmer	1320	89.2	1177	35.8	473	6.4	84	70.2	927	1.0	13	2.2	29	$X^2=6.34$ $df=2, p=0.042$
Indigenous people	45	91.1	41	17.8	8	8.9	4	80.0	36	0.0	0	0.0	0	
Cham	31	96.8	30	32.3	10	0.0	0	71.0	22	0.0	0	0.0	0	
Household Member(*)														
1-3	238	89.9	214	35.3	84	3.8	9	69.3	165	0.8	2	0.8	2	$X^2=12.07$ $df=2, p=0.002$
4-6	822	88.9	731	36.0	296	5.6	46	70.4	579	1.1	9	2.2	18	
7-Over	341	90.0	307	33.1	113	10.3	35	71.8	245	0.6	2	2.6	9	
Age(*)														
15-24	543	89.9	488	33.1	180	7.7	42	78.3	425	0.9	5	2.2	12	$X^2=10.23$ $df=3$
25-34	423	90.3	382	37.6	159	7.6	32	67.8	287	1.2	5	2.1	9	
35-44	249	87.6	218	39.0	97	5.2	13	67.5	168	0.8	2	2.4	6	$P=0.017$
45-55	186	88.2	164	30.6	57	1.6	3	58.6	109	0.5	1	1.1	2	
Education(*)														
No Schooling	122	87.7	107	32.8	40	5.7	7	68.9	84	0.0	0	0.8	1	$X^2=30.24$ $df=4$
Primary School	536	93.3	500	28.9	155	5.0	27	62.3	334	0.4	2	1.7	9	
Secondary School	428	89.3	382	37.9	162	5.8	25	73.8	316	1.2	5	2.1	9	$P=0.000$
High School	258	86.0	222	44.6	115	9.7	25	78.7	203	1.6	4	2.7	7	
University	57	71.9	41	36.8	21	10.5	6	91.2	52	3.5	2	5.3	3	
PPI Index(*)														
Poorest (0-24)	129	93.0	120	26.4	34	4.7	6	62.8	81	0.0	0	1.6	2	$X^2=12.98$ $df=3$
Poor (25-49)	551	92.2	508	33.2	183	4.7	26	68.2	376	0.7	4	1.1	6	
Medium (50-74)	582	86.9	506	36.6	213	6.9	40	73.9	430	1.0	6	2.7	16	$P=0.005$
High (75-100)	139	84.9	118	45.3	63	12.9	18	73.4	102	2.2	3	3.6	5	
Working Youth(*)														
No	1064	88.3	940	36.5	388	6.4	68	69.2	736	0.9	10	2.2	23	$X^2=4.83$ $df=1, P=0.028$
Yes	337	92.6	312	31.2	105	6.5	22	75.1	253	0.9	3	1.8	6	
Landowner(*)														
No	182	92.9	169	35.2	64	4.4	8	63.7	116	1.6	3	1.6	3	$X^2=4.73$ $df=1, P=0.030$
Yes	1219	88.8	1083	35.2	429	6.7	82	71.6	873	0.8	10	2.1	26	
Occupation(*)														
Farmer	588	92.0	541	31.5	185	2.9	17	65.1	383	0.3	2	1.2	7	$X^2=21.01$ $df=12$
Business person	225	91.6	206	40.0	90	10.7	24	72.4	163	0.0	0	3.6	8	
Sales and services	73	90.4	66	43.8	32	6.8	5	84.9	62	0.0	0	1.4	1	$P=0.050$
Skilled Manual	65	92.3	60	41.5	27	6.2	4	64.6	42	1.5	1	1.5	1	
Housework/housewife	73	82.2	60	27.4	20	13.7	10	69.9	51	4.1	3	2.7	2	
Teacher	33	75.8	25	33.3	11	6.1	2	69.7	23	9.1	3	0.0	0	
University Student	26	76.9	20	42.3	11	15.4	4	100.0	26	0.0	0	7.7	2	
Non-university student	184	87.0	160	36.4	67	8.7	16	81.5	150	1.1	2	2.2	4	
Professional-technical-management	49	85.7	42	26.5	13	8.2	4	67.3	33	0.0	0	6.1	3	
Government official	54	77.8	42	48.1	26	3.7	2	66.7	36	3.7	2	0.0	0	
Forestry Worker	4	100.0	4	25.0	1	25.0	1	50.0	2	0.0	0	25.0	1	
Coastal fisherman/woman	28	100.0	28	42.9	12	7.1	2	67.9	19	0.0	0	0.0	0	
Freshwater fisherman/woman	21	95.2	20	19.0	4	0.0	0	66.7	14	4.8	1	0.0	0	

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 99: Where do you usually watch? (Frequency Table)
Base: VCD/DVD viewers

Items	%	#
My own house	64.8	908
Friend or neighbour's house	25.6	359
Relative's house	18.9	265
Coffee shop	16.4	230
Paid-for public service	2.9	40
Free public service	1.2	17
Other	0.8	11
NGOs	0.6	8
On the bus	0.1	1
Base		1401

Table 100: Usually, where do you watch?
Base: VCD/DVD viewers

	Base	My own house		Friend or neighbour's house		Relative's house		Coffee shop		
		%	#	%	#	%	#	%	#	
All Respondents	1401	64.8	908	25.6	359	18.9	265	16.4	230	
Sex(*)										
Male	770	62.1	478	28.1	216	17.8	137	27.7	213	$X^2=5.59$ $df=1, P=0.018$
Female	631	68.1	430	22.7	143	20.3	128	2.7	17	
Residence(*)										
Urban	479	80.0	383	19.2	92	11.3	54	15.9	76	$X^2=73.22$ $df=1, P=0.000$
Rural	922	56.9	525	29.0	267	22.9	211	16.7	154	
Region(*)										
Phnom Penh	146	81.5	119	17.1	25	5.5	8	19.2	28	$X^2=58.94$ $df=4$ $P=0.000$
Plain	388	72.2	280	24.7	96	16.8	65	18.6	72	
Tonle Sap	391	64.7	253	20.7	81	20.7	81	4.9	19	
Coastal	218	47.7	104	37.2	81	25.7	56	35.3	77	
Mountain	258	58.9	152	29.5	76	21.3	55	13.2	34	
Ethnicity(*)										
Khmer	1320	66.2	874	25.2	332	18.9	249	16.4	217	$X^2=20.81$ $df=2, P=0.000$
Indigenous people	45	37.8	17	44.4	20	8.9	4	8.9	4	
Cham	31	45.2	14	22.6	7	35.5	11	25.8	8	
Household Member(*)										
1-3	238	54.2	129	22.7	54	24.4	58	17.2	41	$X^2=14.27$ $df=2, P=0.001$
4-6	822	66.7	548	25.2	207	19.2	158	15.9	131	
7-Over	341	67.7	231	28.7	98	14.4	49	17.0	58	
Age(*)										
15-24	543	65.6	356	30.4	165	21.0	114	13.6	74	$X^2=8.86$ $df=3$ $P=0.031$
25-34	423	60.3	255	26.7	113	20.6	87	21.0	89	
35-44	249	65.1	162	20.5	51	16.1	40	18.5	46	
45-55	186	72.6	135	16.1	30	12.9	24	11.3	21	
Education(*)										
No Schooling	122	48.4	59	37.7	46	18.9	23	9.8	12	$X^2=80.83$ $df=4$ $P=0.000$
Primary School	536	54.9	294	28.7	154	22.6	121	14.7	79	
Secondary School	428	70.6	302	23.6	101	18.0	77	19.6	84	
High School	258	77.9	201	20.2	52	14.7	38	19.0	49	
University	57	91.2	52	10.5	6	10.5	6	10.5	6	
PPI Index(*)										
Poorest (0-24)	129	13.2	17	55.8	72	35.7	46	14.7	19	$X^2=322.33$ $df=3$ $P=0.000$
Poor (25-49)	551	51.4	283	34.1	188	25.8	142	18.5	102	
Medium (50-74)	582	82.0	477	14.9	87	12.0	70	16.0	93	
High (75-100)	139	94.2	131	8.6	12	5.0	7	11.5	16	
Working Youth(*)										
No	1064	66.1	703	23.6	251	18.3	195	17.4	185	$X^2=9.60$, $df=1, P=0.002$
Yes	337	60.8	205	32.0	108	20.8	70	13.4	45	
Landowner(*)										
No	182	53.8	98	30.2	55	17.0	31	22.0	40	$X^2=11.02$ $df=1, P=0.001$
Yes	1219	66.4	810	24.9	304	19.2	234	15.6	190	
Occupation(*)										
Farmer	588	51.0	300	34.0	200	25.5	150	16.0	94	$X^2=117.99$ $df=12$ $P=0.000$
Business person	225	83.1	187	10.2	23	9.8	22	11.6	26	
Sales and services	73	67.1	49	19.2	14	11.0	8	30.1	22	
Skilled Manual	65	64.6	42	29.2	19	7.7	5	33.8	22	
Housework/housewife	73	74.0	54	21.9	16	15.1	11	6.8	5	
Teacher	33	90.9	30	9.1	3	9.1	3	21.2	7	
University Student	26	96.2	25	19.2	5	19.2	5	15.4	4	
Non-university student	184	70.7	130	28.8	53	21.7	40	13.6	25	
Professional-technical-management	49	75.5	37	16.3	8	16.3	8	8.2	4	
Government official	54	72.2	39	11.1	6	5.6	3	27.8	15	
Forestry Worker	4	75.0	3	0.0	0	25.0	1	25.0	1	
<i>Coastal fisherman/woman</i>	28	46.4	13	35.7	10	35.7	10	28.6	8	
<i>Freshwater fisherman/woman</i>	21	52.4	11	47.6	10	23.8	5	14.3	3	

Note:
A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.
Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 101: Have you ever heard of outreach activities?
Base: All respondents

	Base	Have you ever known or heard about outreach?						
		No		Yes		Don't know		
		%	#	%	#	%	#	
All Respondents	2401	42.9	1031	56.1	1346	1.0	24	
Sex								
Male	1203	43.9	528	55.4	666	0.7	9	
Female	1198	42.0	503	56.8	680	1.3	15	
Residence								
Urban	820	42.6	349	55.9	458	1.6	13	
Rural	1581	43.1	682	56.2	888	0.7	11	
Region(*)								
Phnom Penh	200	57.0	114	<i>43.0</i>	86	0.0	0	$\chi^2 = 138.55$ df=8 P=0.000
Plain	676	53.8	364	<i>45.4</i>	307	0.7	5	
Tonle Sap	750	43.7	328	54.4	408	1.9	14	
Coastal	300	20.3	61	79.7	239	0.0	0	
Mountain	475	34.5	164	64.4	306	1.1	5	
Ethnicity								
Khmer	2254	42.9	968	56.1	1264	1.0	22	
Indigenous people	89	37.1	33	60.7	54	2.2	2	
Cham	47	53.2	25	46.8	22	0.0	0	
Household Member								
1-3	439	40.1	176	58.5	257	1.4	6	
4-6	1404	44.7	627	54.3	762	1.1	15	
7-Over	558	40.9	228	58.6	327	0.5	3	
Age								
15-24	787	41.7	328	57.3	451	1.0	8	
25-34	712	42.1	300	57.2	407	0.7	5	
35-44	495	44.0	218	54.9	272	1.0	5	
45-55	407	45.5	185	53.1	216	1.5	6	
Education(*)								
No Schooling	257	49.8	128	<i>49.8</i>	128	0.4	1	$\chi^2 = 23.33$ df=8 P=0.003
Primary School	988	46.7	461	<i>52.1</i>	515	1.2	12	
Secondary School	682	38.4	262	60.6	413	1.0	7	
High School	382	37.2	142	62.0	237	0.8	3	
University	92	41.3	38	57.6	53	1.1	1	
PPI Index								
Poorest (0-24)	257	47.5	122	51.4	132	1.2	3	
Poor (25-49)	942	43.7	412	55.4	522	0.8	8	
Medium (50-74)	960	40.8	392	58.0	557	1.1	11	
High (75-100)	242	43.4	105	55.8	135	0.8	2	
Working Youth								
No	1901	42.6	810	56.5	1074	0.9	17	
Yes	500	44.2	221	54.4	272	1.4	7	
Landowner(*)								
No	300	52.0	156	<i>46.3</i>	139	1.7	5	$\chi^2 = 13.86$ df=2, P=0.001
Yes	2101	<i>41.6</i>	875	57.4	1207	0.9	19	
Occupation								
Farmer	1096	44.0	482	54.7	600	1.3	14	
Business person	390	44.4	173	54.6	213	1.0	4	
Sales and services	105	45.7	48	54.3	57	0.0	0	
Skilled Manual	96	50.0	48	50.0	48	0.0	0	
Housework/housewife	142	45.8	65	53.5	76	0.7	1	
Teacher	46	23.9	11	76.1	35	0.0	0	
University Student	44	40.9	18	59.1	26	0.0	0	
Non-university student	250	37.6	94	62.0	155	0.4	1	
Professional-technical-management	90	48.9	44	47.8	43	3.3	3	
Government official	93	28.0	26	71.0	66	1.1	1	
Forestry Worker	5	40.0	2	60.0	3	0.0	0	
<i>Coastal fisherman/woman</i>	35	40.0	14	57.1	20	2.9	1	
<i>Freshwater fisherman/woman</i>	35	51.4	18	48.6	17	0.0	0	

Note:
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Figures in **bold** represent cells with high positive, while those in **bold italic** represent high negative relation between both variables

Table 102: When was the last time you participated in outreach activities?
Base: Respondents who had heard of outreach activities

	Base	When was the last time you participated in outreach activities?									
		Today/yesterday		In the past week		In the past month		In the past year		Never	
		%	#	%	#	%	#	%	#	%	#
All Respondents	1346	43.3	583	2.2	29	9.0	121	30.4	409	15.2	204
Sex(*)											
Male	666	42.8	285	3.3	22	9.8	65	33.6	224	10.5	70
Female	680	43.8	298	<i>1.0</i>	7	8.2	56	<i>27.2</i>	185	19.7	134
Residence											
Urban	458	46.9	215	2.2	10	7.4	34	27.5	126	15.9	73
Rural	888	41.4	368	2.1	19	9.8	87	31.9	283	14.8	131
Region(*)											
Phnom Penh	86	45.3	39	1.2	1	15.1	13	36.0	31	2.3	2
Plain	307	49.5	152	1.0	3	5.9	18	26.7	82	16.9	52
Tonle Sap	408	46.8	191	2.9	12	7.8	32	32.6	133	9.8	40
Coastal	239	<i>28.5</i>	68	0.8	2	10.5	25	31.8	76	28.5	68
Mountain	306	43.5	133	3.6	11	10.8	33	28.4	87	13.7	42
Ethnicity											
Khmer	1264	43.1	545	2.2	28	9.1	115	30.5	386	15.0	190
Indigenous people	54	40.7	22	1.9	1	5.6	3	38.9	21	13.0	7
Cham	22	59.1	13	0.0	0	9.1	2	<i>9.1</i>	2	22.7	5
Household Member											
1-3	257	44.0	113	2.3	6	11.7	30	28.4	73	13.6	35
4-6	762	43.2	329	2.4	18	9.6	73	30.8	235	14.0	107
7-Over	327	43.1	141	1.5	5	5.5	18	30.9	101	19.0	62
Age											
15-24	451	44.6	201	1.6	7	10.0	45	27.7	125	16.2	73
25-34	407	46.4	189	1.5	6	8.6	35	31.0	126	12.5	51
35-44	272	43.0	117	3.3	9	6.6	18	30.5	83	16.5	45
45-55	216	35.2	76	3.2	7	10.6	23	34.7	75	16.2	35
Education											
No Schooling	128	38.3	49	2.3	3	6.3	8	29.7	38	23.4	30
Primary School	515	43.9	226	2.3	12	9.3	48	28.3	146	16.1	83
Secondary School	413	41.6	172	1.7	7	9.4	39	34.4	142	12.8	53
High School	237	48.9	116	1.7	4	8.4	20	28.3	67	12.7	30
University	53	37.7	20	5.7	3	11.3	6	30.2	16	15.1	8
PPI Index											
Poorest (0-24)	132	42.4	56	2.3	3	7.6	10	29.5	39	18.2	24
Poor (25-49)	522	40.2	210	2.5	13	9.6	50	30.3	158	17.4	91
Medium (50-74)	557	45.4	253	1.8	10	9.0	50	31.1	173	12.7	71
High (75-100)	135	47.4	64	2.2	3	8.1	11	28.9	39	13.3	18
Working Youth											
No	1074	42.5	456	2.2	24	9.0	97	30.9	332	15.4	165
Yes	272	46.7	127	1.8	5	8.8	24	28.3	77	14.3	39
Landowner											
No	139	47.5	66	1.4	2	13.7	19	<i>23.0</i>	32	14.4	20
Yes	1207	42.8	517	2.2	27	8.5	102	31.2	377	15.2	184
Occupation											
Farmer	600	41.3	248	2.7	16	8.7	52	31.5	189	15.8	95
Business person	213	49.8	106	1.4	3	7.0	15	26.8	57	15.0	32
Sales and services	57	47.4	27	0.0	0	10.5	6	38.6	22	3.5	2
Skilled Manual	48	45.8	22	2.1	1	6.2	3	27.1	13	18.8	9
Housework/housewife	76	50.0	38	1.3	1	5.3	4	22.4	17	21.1	16
Teacher	35	37.1	13	2.9	1	11.4	4	31.4	11	17.1	6
University Student	26	34.6	9	7.7	2	7.7	2	30.8	8	19.2	5
Non-university student	155	41.9	65	0.0	0	12.3	19	27.1	42	18.7	29
Professional-technical-management	43	60.5	26	0.0	0	9.3	4	25.6	11	4.7	2
Government official	66	30.3	20	7.6	5	15.2	10	42.4	28	4.5	3
Forestry Worker	3	0.0	0	0.0	0	66.7	2	33.3	1	0.0	0
<i>Coastal fisherman/woman</i>	20	45.0	9	0.0	0	5.0	1	30.0	6	20.0	4
<i>Freshwater fisherman/woman</i>	17	47.1	8	0.0	0	5.9	1	41.2	7	5.9	1

Note:

A star (*) reports a significant relation between a demographic variable and dependent variable at 5% significance level.

Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

**Table 103: Have you ever participated in the following outreach activities?
Base: All respondents**

	Base	Educational Play		Group discussion		Workshop		Direct education at home/family		Listening club		Show card						
		%	#	%	#	%	#	%	#	%	#	%	#					
All Respondents	2396	21.6	518	37.3	894	13.1	313	21.7	520	5.8	140	28.9	693					
Sex(*)														$\chi^2=8.63$	$\chi^2=12.48$	$\chi^2=18.77$		
Male	1201	23.1	278	35.9	431	15.1	181	18.7	225	6.3	75	24.9	299	df=1,P=0.003	df=1,P=0.000	df=1,P=0.000		
Female	1195	20.1	240	38.7	463	11.0	132	24.7	295	5.4	65	33.0	394					
Residence(*)														$\chi^2=14.89$				
Urban	818	23.1	189	36.9	302	16.8	137	20.2	165	6.0	49	27.5	224	df=1,P=0.000				
Rural	1578	20.8	329	37.4	592	11.2	176	22.5	355	5.8	91	29.7	469					
Region(*)														$\chi^2=33.42$	$\chi^2=68.61$	$\chi^2=14.75$	$\chi^2=21.89$	
Phnom Penh	200	14.0	28	23.5	47	14.0	28	13.5	27	4.0	8	21.0	42	df=4	df=4	df=4	df=4	
Plain	674	21.8	147	28.5	192	12.2	82	20.8	140	6.8	46	25.1	169	P=0.000	P=0.000	P=0.005	P=0.000	
Tonle Sap	750	19.6	147	46.7	350	15.2	114	25.2	189	5.0	37	34.4	257					
Coastal	300	33.3	100	38.0	114	12.0	36	23.0	69	7.7	23	30.0	90					
Mountain	472	20.3	96	40.2	191	11.2	53	20.0	95	5.5	26	28.4	135					
Ethnicity(*)														$\chi^2=7.16$				
Khmer	2251	22.0	496	37.3	839	13.3	299	21.5	484	5.7	129	29.0	652	df=2, p=0.028				
Indigenous people	87	10.3	9	37.1	33	10.1	9	27.0	24	8.0	7	28.1	25					
Cham	47	25.5	12	38.3	18	8.7	4	21.3	10	8.7	4	30.4	14					
Household Member(*)														$\chi^2=7.88$				
1-3	439	23.2	102	41.0	180	14.8	65	23.0	101	5.7	25	28.0	122	df=2, p=0.019				
4-6	1401	19.7	276	36.0	505	12.2	170	21.6	303	5.2	73	28.5	399					
7-Over	556	25.2	140	37.5	209	14.0	78	20.9	116	7.5	42	30.9	172					
Age(*)														$\chi^2=44.48$	$\chi^2=7.91$	$\chi^2=16.88$		
15-24	786	29.0	228	33.5	264	13.6	107	21.6	170	7.1	56	34.4	270	df=3	df=3	df=3		
25-34	709	21.0	149	38.4	273	11.1	79	22.6	161	5.4	38	26.0	185	P=0.000	P=0.048	P=0.001		
35-44	495	16.0	79	38.4	190	12.6	62	21.0	104	5.1	25	27.2	134					
45-55	406	15.3	62	41.1	167	16.0	65	20.9	85	5.2	21	25.7	104					
Education(*)														$\chi^2=48.27$	$\chi^2=15.15$	$\chi^2=156.51$	$\chi^2=24.77$	$\chi^2=39.73$
No Schooling	256	12.5	32	38.5	99	5.1	13	16.4	42	3.9	10	22.6	58	df=4	df=4	df=4	df=4	df=4
Primary School	986	17.7	175	34.5	341	8.0	79	21.6	213	4.3	42	23.9	235	P=0.000	P=0.004	P=0.000	P=0.000	P=0.000
Secondary School	681	24.4	166	35.9	245	12.8	87	21.6	147	6.3	43	32.6	222					
High School	381	29.7	113	42.8	163	24.7	94	24.7	94	8.1	31	36.7	140					
University	92	34.8	32	50.0	46	43.5	40	26.1	24	15.2	14	41.3	38					
PPI Index(*)														$\chi^2=11.22$	$\chi^2=42.59$			
Poorest (0-24)	257	14.0	36	39.3	101	5.8	15	21.0	54	5.4	14	27.3	70	df=3	df=3			
Poor (25-49)	939	21.6	203	36.9	347	9.6	90	20.5	193	5.4	51	28.1	264	P=0.011	P=0.000			
Medium (50-74)	958	23.7	227	38.2	366	16.7	160	23.3	223	6.3	60	31.0	296					
High (75-100)	242	21.5	52	33.1	80	19.8	48	20.7	50	6.2	15	26.0	63					
Working Youth(*)														$\chi^2=22.20$	$\chi^2=5.17$			
No	1896	21.1	400	39.7	753	13.9	263	21.9	415	5.8	109	28.4	537	df=1,P=0.000	df=1,P=0.023			
Yes	500	23.6	118	28.2	141	10.0	50	21.0	105	6.2	31	31.2	156					
Landowner(*)														$\chi^2=13.51$	$\chi^2=5.38$			
No	300	18.7	56	27.7	83	10.7	32	17.7	53	3.7	11	23.2	69	df=1,P=0.000	df=1,P=0.020			
Yes	2096	22.0	462	38.6	811	13.4	281	22.3	467	6.2	129	29.8	624					
Occupation														$\chi^2=80.42$				
Farmer	1094	18.1	198	38.7	424	8.7	95	22.1	242	5.6	61	26.6	291	df=12				
Business person	389	19.5	76	31.4	122	8.2	32	21.1	82	4.6	18	22.2	86	P=0.000				
Sales and services	105	21.9	23	27.6	29	10.5	11	16.2	17	3.8	4	28.6	30					
Skilled Manual	96	21.9	21	28.1	27	12.5	12	14.6	14	4.2	4	22.9	22	$\chi^2=76.37$				
Housework/housewife	141	15.6	22	27.7	39	6.5	9	21.4	30	2.1	3	28.4	40	df=12				
Teacher	46	34.8	16	60.9	28	67.4	31	30.4	14	13.0	6	54.3	25	P=0.000				
University Student	44	40.9	18	52.3	23	34.1	15	27.3	12	13.6	6	43.2	19	$\chi^2=62.30$				
Non-university student	249	38.6	96	41.2	103	18.4	46	22.8	57	8.4	21	40.2	100	df=12				
Professional-technical-management	90	22.2	20	24.4	22	15.6	14	17.8	16	6.7	6	31.1	28	P=0.000				
Government official	93	24.7	23	64.5	60	46.2	43	30.1	28	9.8	9	43.0	40					
Forestry Worker	5	20.0	1	20.0	1	20.0	1	0.0	0	0.0	0	0.0	0					
Coastal fisherman/woman	35	8.6	3	25.7	9	2.9	1	5.7	2	0.0	0	14.3	5					
Freshwater fisherman/woman	35	2.9	1	45.7	16	8.6	3	25.7	9	5.9	2	28.6	10					

Note:
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Figures in bold represent cells with high positive, while those in bold italic represent high negative relation between both variables

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