CLIMATE CHANGE IN THE INDIAN MIND 2022

YALE PROGRAM ON Climate Change Communication

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This report is based on findings from a nationally representative survey of adults (18+) in India conducted by the <u>Yale Program on Climate Change Communication</u> (YPCCC) and the <u>Centre for</u> <u>Voting Opinion & Trends in Election Research</u> (CVoter). Interview dates: October 21, 2021 – January 9, 2022. Interviews: 4,619 adults. Average margin of error: +/- 1.4 percentage points at the 95% confidence level.

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Executive Summary

From October 21, 2021, to January 9, 2022, a research team from the Yale Program on Climate Change Communication and CVoter conducted a nationally representative survey of 4,619 Indian adults (18+). The study was designed to investigate current public climate change awareness, beliefs, attitudes, policy support, and behavior, as well as public observations of change in local weather and climate patterns and self-reported vulnerability to extreme weather events.

This study builds on our <u>prior</u> *Climate Change in the Indian Mind* survey, which was conducted in November and December, 2011 (n = 4,031). Where applicable, we describe differences in opinion among the Indian public in the decade since we conducted our previous survey.

Among the key findings of this report:

Global Warming Awareness and Beliefs

- 54% of people in India say they know either "just a little" about global warming or have never heard of it, while only 9% say they know "a lot."
- Additionally, only 35% of people in India say they hear about global warming in the media at least once a week.
- However, when given a short definition of global warming and how it affects weather patterns, 84% of people in India say they think global warming is happening (15 percentage points higher than in 2011).
- 57% think global warming is caused mostly by human activities, while 31% think it is caused mostly by natural changes in the environment.
- 74% say that they have experienced the effects of global warming (+24 percentage points since 2011).

Global Warming Risk Perceptions

- 81% of people in India are worried about global warming, including 50% who are "very worried."
- Large majorities think global warming will harm plant and animal species (80%), people in India (77%), future generations of people (77%), people in their own community (72%), and themselves and their own family (69%).
- 49% think people in India are already being harmed by global warming (+29 since 2011).
- Half or more think global warming will cause many more disease epidemics (59%), severe heat waves (54%), severe cyclones (52%), and droughts and water shortages (50%). More than four in ten think global warming will cause many more famines and food shortages (49%) and severe floods (44%).

Support for Climate and Energy Policies

- Most people in India (55%) say the country should reduce its emissions immediately without waiting for other countries to act (+19 since 2011).
- 64% say the government of India should be doing more to address global warming.
- Large majorities favor specific policies:
 - A national program to teach all Indians about global warming (83%, +13 since 2011).



- A national program to train people for new jobs in the renewable energy industry (83%; not asked previously).
- Encouraging local communities to build check dams to increase local water supplies (82%, +14).
- Preserving or expanding forested areas, even if this means less land for agriculture or housing (69%, +12).
- Requiring new buildings to waste less water and energy, even if this increases their cost (69%, +12).
- Requiring that new automobiles be more fuel efficient, even if this increases the cost of cars and bus fare (66%, +11).
- 73% favor India's participation in the Paris Climate Agreement.
- 62% think that overall, taking action to reduce global warming will either improve economic growth and provide new jobs (45%) or have no effect on economic growth or jobs (17%). Only 19% think it will reduce economic growth and cost jobs.
- 59% think India should increase its use of renewable sources of energy, while only 13% think India should increase its use of fossil fuels.
- 6% are already participating in and 57% are "definitely" willing to join a citizen's campaign to convince leaders in India to take action on global warming.

Local Weather Events: Observations, Vulnerabilities, and Resilience

- 76% of people in India have noticed changes in the average annual amount of rainfall in their local area over the last 10 years.
- 41% say the monsoon has become more predictable in their local area (+17 since 2011).
- 56% say that hot days have become more frequent in their local area.
- 74% say it would take their household several months or more to recover from a severe drought, and 63% say it would take several months or more to recover from a severe flood. This includes many who say it would take them several *years* to recover from a severe drought (28%) or a severe flood (26%).
- More than half of people in India say their income does not cover their needs and they either have "some difficulties" (26%) or "great difficulties" (27%) as a result.
- About two in three people in India (65%) say they have few or no friends or relatives they could count on for help if they were in trouble.



Introduction

Home to more than 1.3 billion people, India accounts for nearly 18% of the global population, but uses only 6% of the world's primary energy consumption (IEA, 2021). For example, the per capita energy consumption in India is 0.6 tonnes of oil equivalent, which is only one-third of the global average (IEA, 2021). However, because of its large population, India was the third largest national emitter in 2020 (behind China and the United States), emitting 2.4 gigatons of carbon dioxide (Crippa et al, 2021).

India is among the countries most vulnerable to the impacts of climate change. Climate change has already begun to alter growing seasons in India (Mani et al., 2018), and with almost 50% of Indians working in agriculture and other climate sensitive sectors (Chand & Singh, 2022), the damage to productivity and health is significant (Mani et al., 2018). From 1901–2018, India's average temperature rose 0.7°C. During the summer monsoon season, India is experiencing both more frequent dry spells and more intense wet spells (Krishnan et al., 2020). Across all of Asia, including India, climate change will cause water shortages, which could affect more than a billion people by the 2050s (Krishnan et al., 2020).

India's population is also vulnerable to sea level rise, with up to 310 million people inhabiting low elevation coastal zones. About 30% of India's population, approximately 363 million people, are poor, and 1.77 million people are homeless (Government of India, 2016). Many Indians live in "hotspots," where changes in climate negatively affect living standards. These hotspots are growing as climate change worsens, and it is projected that by 2050, 148.3 million people in India will be living in severe hotspots (Mani et al., 2018). Additionally, more than 80 percent of India's population lives in districts highly vulnerable to extreme weather events (Mohanty & Wadhawan, 2021).

India has long been a key player in international climate negotiations and has begun implementing a diverse portfolio of policies nationally and within individual states to improve energy efficiency, develop clean energy sources, and prepare for the impacts of a changing climate. About 33 States and Union Territories have also announced state-level action plans to address climate change.

In 2015, India submitted its first climate action plan with the aim of reducing the emissions intensity of its GDP by 33-35% by 2030, generating 40% of its power from renewable energy sources, and increasing forest cover. The updated National Action Plan on Climate Change commits to reducing emissions intensity by 45% by 2030, compared to 2005, and to achieve 50% of cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030 (PIB, 2022, Government of India, 2022). India has increased its solar capacity rapidly, ranking fifth for installed solar capacity in the 2020 Human Development Report, and plans to expand to 450 GW renewable energy capacity by 2030 (IEA, 2021). India has pledged to achieve net-zero emissions by 2070.

However, to meet its 2070 emissions target, India will need an estimated \$10.1 trillion in investments (ASPI, 2022). In the face of rapid urbanization and economic growth, India's actions to deal with energy and climate challenges will be key to a global clean energy transition. Even if India implements its nationally determined commitments under the Paris Agreement, it is expected to see a further 50% rise in its carbon dioxide emissions by 2040 (IEA, 2021). The majority of India's emissions are to come from infrastructure, buildings, and vehicles that do not currently exist, presenting a huge opportunity for change in the trajectory of emissions.

To support economic development and build low-carbon infrastructure, India needs to invest 1.5 times or more than advanced economies as a share of GDP today (MGI, 2022). Without international support, financing this additional investment would likely result in a 2% decline in total household consumption (ASPI, 2022). In India, about 5 million jobs in the fossil-fuel sector would be lost. While 12 million new jobs would be created in the renewable energy industry, upskilling India's future workforce remains a challenge. Initiatives like "Skill India" are expected to provide training in sectors including sustainable development for 400 million people by 2022



VALE PROGRAM ON Climate Change Communication (Government of India, 2016). India has also set aside \$55.6 million for the National Adaptation Fund to support the adaptation of climate-sensitive sectors like forestry (Government of India, 2016).

An effective national strategy, however, must take into account the climate change and energy-related beliefs, attitudes, policy preferences, and behaviors of the Indian people, who will play a vital role in the success or failure of this strategy through their decisions and behavior as citizens, consumers, and communities. Building public acceptance, support, and demand for new policies to both limit the severity of global warming and prepare for the impacts of a changing climate will require education and communication strategies based on a clear understanding of what Indians already know, believe, and support, as well as what they currently misunderstand, disbelieve, or oppose.

In an effort to help establish a baseline understanding of public responses to these issues in India, the Yale Program on Climate Change Communication first conducted a national survey in 2011 to investigate the state of public climate change awareness, beliefs, attitudes, policy support, and behaviors, as well as public observations of changes in local weather and climate patterns and self-reported vulnerability to extreme weather events. This new report provides the results from a second nationally representative survey conducted in 2021-2022 on the same themes, including many of the same questions, enabling us to track changes in public responses in India over time.

Climate change and Indian society are both highly complex and no single study can do service to their full richness and diversity. Nonetheless, this study takes an in-depth and rigorous look at some of the key dimensions of these issues in India. This research is intended to contribute to both scientific and public understanding and dialogue about these issues and provide useful information for the Indian climate change community.

This report provides the topline survey results. A second report is forthcoming which will segment the survey respondents into distinct audiences that would benefit from tailored climate change education and communication.

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1. Global Warming Awareness and Beliefs

1.1 Most people in India know just a little about global warming or have never heard of it.

Individuals, policymakers, and societies must be aware of and have at least a basic understanding of a threat to make informed decisions about how to respond to it. Only 9% of people in India say they know "a lot" about global warming, while 32% say they know "something" about it. By contrast, 20% say they know "just a little" about global warming, and 35% say they have "never heard of it."

Compared to our survey in 2011, the percentage of people in India who say they know "a lot" about global warming has remained about the same. The percentage of people in India who have never heard of global warming is 10 percentage points higher, while the percentage who say they "don't know" or did not provide a response is 13 percentage points lower.

It is important to note, however, that lack of awareness of the issue does not mean that individuals have not observed changes in local weather and climate patterns, as evidenced in the Observations, Vulnerabilities, and Resilience to Local Weather Events section later in this report. This suggests that many people in India may have observed changes in their local climate and weather patterns without understanding that these changes are related to the broader issue of global climate change.



Most people in India know just a little about global warming or have never heard of it

How much do you know about global warming? Do you know a lot about it, something about it, just a little about it, or have you never heard of it?

Oct. 2021 - Jan. 2022



1.2 A large majority of people in India think global warming is happening.

After being asked about their level of knowledge about global warming, respondents were given a short definition of it: "Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate and weather patterns may change as a result." They were then asked, "What do you think? Do you think that global warming is happening?"

After reading the short description, a large majority of people in India (84%) said they think global warming is happening. By comparison, only 6% of people in India said they think global warming is not happening, and 10% either said they "don't know" or did not provide a response.

The percentage of people who think global warming is happening is 15 percentage points higher than in 2011, while the percentage who say it is not happening is four percentage points lower, and the percentage who say they "don't know" or did not provide a response is 11 percentage points lower.



A large majority of people in India think global warming is happening

Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate and weather patterns may change as a result. What do you think? Do you think that global warming is happening? Would you say 'yes', 'no', or 'I don't know'?

Oct. 2021 - Jan. 2022





1.3 A majority of people in India think global warming is primarily human-caused.

A majority of people in India say that if global warming is happening, it is caused mostly by human activities (57%), while 31% say it is caused mostly by natural changes in the environment.

The percentage of people in India who think global warming is caused mostly by human activities is four percentage points higher than in 2011.



If global warming is happening, do you think it is caused mostly by human activities, by natural changes in the environment, some other cause, or none of these because it is not happening?

Oct. 2021 - Jan. 2022





1.4 A large majority of people in India say they have personally experienced the effects of global warming.

About three in four people in India (74%) either "strongly agree" (54%) or "somewhat agree" (20%) that they have personally experienced the effects of global warming. By contrast, only 14% either "strongly disagree" (10%) or "somewhat disagree" (4%) that they have personally experienced the effects of global warming.

The total percentage of people in India who either "strongly" or "somewhat" agree that they have personally experienced global warming is 24 percentage points higher than in 2011, and the percentage who "strongly agree" is three times higher (+36 percentage points). By contrast, the total percentage who "strongly" or "somewhat" disagree is 17 percentage points lower than in 2011.



I will now read you a statement. Please tell me how much you agree or disagree with it. I have personally experienced the effects of global warming.

Oct. 2021 - Jan. 2022





2. Global Warming Risk Perceptions

2.1 Most people in India are worried about global warming.

A large majority of respondents (81%) say they are either "very worried" (50%) or "somewhat worried" (31%) about global warming. By contrast, a total of only 12% say they are either "not very worried" (5%) or "not at all worried" (7%) about it, and 7% either say they don't know or did not provide a response.

The percentage of people in India who say they are either "very" or "somewhat" worried about global warming is 21 percentage points higher than in 2011, and among those, the percentage who say they are "very worried" is 30 percentage points higher than in 2011.



How worried are you about global warming? Would you say you are very worried, somewhat worried, not very worried, or not at all worried?

Oct. 2021 - Jan. 2022



2.2 Large majorities of people in India say global warming will cause harm.

Large majorities of people in India say global warming will cause either a "great deal" or a "moderate amount" of harm to people and other species. That includes plant and animal species (80%), people in India (77%), future generations of people (77%), people in their own community (72%), and themselves and their own family (69%).

The percentage of people in India who say global warming will cause harm to each of these groups is higher than in 2011: plant and animal species (+15 percentage points), people in India (+13), future generations of people (+11), people in their own community (+12), and themselves and their own family (+13).



How much do you think global warming will harm [X]? Would you say a great deal, a moderate amount, only a little, not at all, or do you not know?

Oct. 2021 - Jan. 2022





2.3 About half of people in India think Indians are already being harmed by global warming.

About half of people in India think Indians are already being harmed by global warming (49%) – a much higher percentage than in 2011 (+29 percentage points). Fewer think people in India will be harmed within 10 years (18%), 25 years (10%), 50 years (4%), or 100 years (1%), and only 2% think global warming will never harm people in India, while 17% say they don't know or did not provide a response.



When, if ever, do you think global warming will start to harm people in India? Would you say people in India are being harmed now by global warming or people in India will start to be harmed by global warming in 10 years, in 25 years, in 50 years, in 100 years, or never?

Oct. 2021 - Jan. 2022





2.4 People in India think global warming will have dangerous impacts.

Many people in India think global warming will have a variety of dangerous impacts. Half or more think global warming will cause "many more" disease epidemics (59%), extinctions of plant and animal species (54%), severe heat waves (54%), severe cyclones (52%), and droughts and water shortages (50%). More than four in ten respondents think global warming will cause many more famines and food shortages (49%) and severe floods (44%).

The percentage of people in India who think global warming will have dangerous impacts is higher than in 2011: disease epidemics (+14 percentage points), extinctions of plant and animal species (+6), severe heat waves (+9), severe cyclones (+20), droughts and water shortages (+5), famines and food shortages (+2), and severe floods (+10).



People in India think global warming will have dangerous impacts

In India, over the next 20 years, please tell me if you think global warming will cause more or less of the following, if nothing is done to address it?

Oct. 2021 - Jan. 2022



2.5 A large majority of people in India say global warming is personally important to them.

More than eight in 10 people in India (84%) say global warming is either "extremely important" (39%), "very important" (29%), or "somewhat important" (16%) to them personally. Very few say it is either "not very important" (2%) or "not at all important" (3%), while 11% say they don't know or did not provide a response.

The total percentage of people in India who say global warming is either "extremely," "very," or "somewhat" important to them is 21 percentage points higher than in 2011, while the proportion who say it is either "not very" or "not at all" important is 20 percentage points lower.

A large majority of people in India say global warming is personally



How important is the issue of global warming to you personally? Would you say it is very important, somewhat important, not very important, or not at all important?

Oct. 2021 - Jan. 2022



3. Support for Climate and Energy Policies

3.1 Most people in India say the country should reduce its greenhouse gas emissions without waiting for other countries to act.

More than half of people in India (55%) say India should reduce its own emissions of the gases that cause global warming immediately without waiting for other countries. In contrast, only 6% say India should reduce its own emissions only if rich countries go first, and 17% say India should reduce its own emissions only if all the other countries of the world reduce their emissions at the same time. Additionally, 8% say India should not reduce its emissions under any circumstances, while 15% say they don't know or did not provide a response.

The percentage of people in India who say India should reduce its emissions immediately is 19 percentage points higher than in 2011, while the percentage who say India should reduce its own emissions only if rich countries go first (-11 percentage points) and the percentage who say India should not reduce its emissions under any circumstances (-5) are both lower than in 2011.



Oct. 2021 - Jan. 2022



3.2 Most people in India favor policies to address environmental problems.

Large majorities of people in India either "strongly" or "somewhat" favor policies to address environmental problems in India, including the following:

- A national program to teach all Indians about global warming (83%, +13 percentage points since 2011).
- A national program to train people for new jobs in the renewable energy industry (83%; not asked previously).
- Encouraging local communities to build check dams to increase local water supplies (82%, +14).
- Preserving or expanding forested areas, even if this means less land for agriculture or housing (69%, +12).
- Requiring new buildings to waste less water and energy, even if this increases their cost (69%, +12).
- Requiring that new automobiles be more fuel efficient, even if this increases the cost of cars and bus fare (66%, +11).



Most people in India favor policies to address environmental problems

Next, please tell me how much would you favor or oppose India taking each of the following steps to help deal with environmental problems. Would you strongly favor, somewhat favor, somewhat oppose, or strongly oppose India taking this step?

Oct. 2021 - Jan. 2022



3.3 A majority of people in India say the government should be doing more to address global warming.

Sixty-four percent of people in India say the government of India should be doing either "much more" (47%) or "more" (17%) to address global warming. By contrast, only 9% say the government is currently doing the right amount to address global warming, and 13% say the government should be doing either "less" (7%) or "much less" (6%) to address the issue.

The percentage of people in India who say the government of India should be doing "much more" to address global warming is 23 percentage points higher than in 2011.

A majority of people in India say the government should be doing more



Do you think the government of India should be doing much more, more, less, or much less to address global warming, or is it currently doing the right amount?

Oct. 2021 - Jan. 2022





3.4 A large majority of people in India favor the country's participation in the Paris Climate Agreement.

In December 2015, officials from 197 countries (nearly every country in the world) met in Paris at the United Nations Climate Change Conference and negotiated a global agreement to limit global warming. On Earth Day, April 22, 2016, India and 174 other countries signed the agreement, with all of the other countries signing soon afterwards.

A large majority of people in India (73%) favor India's participation in the Paris Climate Agreement, including about six in ten (59%) who say they "strongly favor" it.



In 2015, India signed an international agreement in Paris with 196 other countries to limit the pollution that causes global warming. Do you strongly support, somewhat support, somewhat oppose, or strongly oppose India's participation in the Paris Agreement?

Oct. 2021 - Jan. 2022





3.5 Few people in India think taking action to limit global warming will reduce economic growth.

More than twice as many people in India think taking action to reduce global warming will improve economic growth and provide new jobs (45%) than think it will reduce economic growth and cost jobs (19%). Additionally, about one in five (17%) think taking action on global warming will have no effect on economic growth or jobs.



Oct. 2021 - Jan. 2022





3.6 Most people in India say the country should increase its use of renewable energy sources and decrease its use of fossil fuels.

A majority of people in India (59%) say that in the future India should use either "much more" (42%) or "more" (16%) renewable sources of energy, like solar panels and wind turbines, than it does today. Relatively few respondents (12%) say India should use either "much less" (3%) or "less" (9%) renewable energy, and 13% say India should use the same amount of renewable energy as it does today.

Most respondents (54%) also say India should use "much less" (23%) or "less" (31%) fossil fuels, like coal, oil, and gas, than it does today. Few respondents (13%) say India should use "much more" (8%) or "more" (5%) fossil fuels, and 18% say India should use the same amount of fossil fuels as it does today.



Oct. 2021 - Jan. 2022



4. Global Warming in the Media

4.1 About half of people in India say they hear about global warming in the media at least once a month.

About half of people in India (52%) say they hear about global warming in the media once a month or more often, including 35% who say they hear about it at least once a week. In contrast, one in three (33%) say they hear about global warming in the media only several times a year or less often, including 11% who say they never hear about global warming in the media.



About half of people in India say they hear about global warming in the media at least once a month

About how often do you hear about global warming in the media (TV, movies, radio, newspapers/news websites, magazines, etc.)?

Oct. 2021 - Jan. 2022





5. Global Warming Activism

5.1 Most people in India are willing to join a citizens' campaign to convince leaders in India to take action on global warming.

A large majority of people in India (76%) say they are either "already participating in" (6%) or are "definitely" (57%) or "probably" (14%) willing to join a campaign to convince elected officials to take action to reduce global warming. In contrast, few people in India (8%) say they either "probably" (3%) or "definitely" (5%) would *not* join such a campaign.



How willing or unwilling are you to join a citizens' campaign to convince leaders in India to take action to reduce global warming?

Oct. 2021 - Jan. 2022



6. Local Weather Events: Observations, Vulnerabilities, and Resilience

6.1 About three in four people in India have noticed changes in rainfall in their area in the last 10 years.

India is geographically diverse, and different parts of the country experience different patterns of heat, rainfall, and extreme weather. A large majority of people in India say they have observed changes in local climate and weather patterns in their own area.¹

Nationally, more than four in ten people in India (46%) say the average amount of rainfall in their local area has increased over the past 10 years, while 30% say it has decreased, and 22% say it has stayed about the same.

Compared to 2011, a higher percentage of people in India now say the average amount of rainfall in their local area has increased over the past 10 years (+12 percentage points), while a smaller percentage say it has decreased (-16).

About three in four people in India have noticed changes in rainfall in their area in the last 10 years



Over the past ten years, would you say that the average amount of rainfall each year in your local area has been increasing, decreasing, or has it stayed about the same?

Oct. 2021 - Jan. 2022



¹ A future analysis will examine the geographic variation in responses to these questions.

6.2 About one in four people in India say the monsoon in their local area has become less predictable compared to the past.

More than half of people in India say they have observed changes in the predictability of the monsoon in their local area. This includes about four in ten (41%) who say the monsoon has become more predictable compared to the past and 27% who say it has become less predictable. About one in four (26%) say it has not changed.

Compared to 2011, a higher percentage of people in India now say the monsoon has become more predictable in their area (+17 percentage points), while a smaller percentage say it has become less predictable (-11), and about the same percentage say it has not changed.



In your local area, does the monsoon seem more predictable, less predictable, or has it not changed compared to the past?

Oct. 2021 - Jan. 2022





6.3 Most people in India say hot days have become more frequent in their local area.

A majority of people in India (56%) say hot days have become more frequent in their local area, while 18% say they have become less frequent, and 23% say there has been no change.

Fewer (28%) say that droughts have become more frequent, while 30% say droughts have become less frequent, and 32% say they have not changed. Similarly, one in four say that severe storms and floods (both 25%) have become more frequent, while more say they have become less frequent (severe storms, 31%; floods, 28%) or have not changed (severe storms, 34%; floods, 30%).

Compared to 2011, a higher percentage of people in India now say most of these events have become more frequent in their local area (floods, +11 percentage points; droughts, +8; severe storms, +4).



Most people in India say hot days have become more frequent in their local area

Oct. 2021 - Jan. 2022



6.4 A majority of people in India say it would take them several months or more to recover from a severe drought or flood.

About three in four people in India (74%) say it would take their household several months or more to recover from a severe drought, and more than six in ten (63%) say it would take several months or more to recover from a severe flood. This includes about one in four respondents who say it would take them several *years* to recover from a severe drought (28%) or a severe flood (26%).

Compared to 2011, a higher percentage of people in India say it would take their household several months or more to recover from a severe drought (+10 percentage points), while the percentage who say it would take that long to recover from a severe flood is about the same.



If [X] happened in your local area, how long do you think it would take for your household to recover? Would you say it would take you a moseveral months, a year, or several years?

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6.5 More than half of people in India say their income does not cover their needs and they face difficulties.

Only 16% of people in India say their household income covers their needs and they are able to save money, and 21% say their income covers their needs, but by just enough. More than half of people in India say their income does not cover their needs and that they either have "some difficulties" (26%) or "great difficulties" (27%).

The percentage of people in India who say their household is financially stable is lower than in 2011: a lower percentage say their income covers needs and are able to save money (-14 percentage points); or their income covers needs, but by just enough (-16). In contrast, the percentage who say they face financial hardship is higher than in 2011: a higher percentage say their income does not cover needs and they have some difficulties (+10 percentage points); or their income does not cover needs and they have great difficulties (+17). It is possible these results partly reflect the national context during the COVID-19 pandemic.



I will now read out a few statements about your household income. Please tell me which one of the following statements is closest to your situation.

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6.6 About two in three people in India say they have few or no friends or relatives they could count on for help if they were in trouble.

When asked how many relatives and friends they could count on if they were in trouble and needed help, about two-thirds of people in India say either "none" (32%) or "1 to 5" (33%). Only about one in four say they have either "6 to 10" (10%) or more than 10 (13%) friends or relatives they could count on to help them.

The percentage of respondents who say that they do not have any friends or relatives they could count on to help if they were in trouble is higher by a small margin than in 2011 (+4 percentage points), while the other responses have not changed significantly. It is possible these results partly reflect the national context during the COVID-19 pandemic.



If you were in trouble, how many relatives and friends could you count on to help you? Would you say none, one to five, six to ten, eleven to fifteen, sixteen to twenty, or more than twenty?

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Appendix I: Methods

This report is based on findings from a nationally representative survey of adults (18+) in India conducted by the <u>Yale Program on Climate Change Communication</u> and <u>CVoter</u>, an international survey company headquartered in Delhi, India. A nationally representative sample of respondents was contacted by mobile telephone using predictive dialing technology and computer-assisted telephone interviewing (CATI). The survey was translated into 12 languages (Hindi, Punjabi, Gujarati, Marathi, Kannada, Malayalam, Tamil, Telugu, Odiya, Bangla, Asamiya, and English) and respondents received the survey in one of those languages based on their geographic location in India. National Census-based demographic parameters were used to create sampling targets for gender, education, and socioeconomic status. The results were also weighted after completion of the data collection period to adjust the final sample to match national demographic parameters on gender, age, education, income, religion, and urbanicity. Interview dates: October 21, 2021 – January 9, 2022. Interviews: 4,619 adults (18+). Average margin of error: +/- 1.4 percentage points at the 95% confidence level.

In the data tables, bases specified are unweighted while percentages are weighted to match national population parameters. For tabulation purposes, percentage points are rounded to the nearest whole number. As a result, percentages in a given chart may total slightly higher or lower than 100%. Summed response categories (e.g., "strongly agree" + "somewhat agree") are rounded after sums are calculated. For example, in some cases, the sum of 25% + 25% might be reported as 51% (e.g., 25.3% + 25.3% = 50.6%, which, after rounding, would be reported as 25% + 25% = 51%). The results from 2011 that have been used for comparisons over time have been recalculated using updated analytic and rounding rules, and thus may differ slightly from the results that were reported at that time.

The survey instrument was designed by Anthony Leiserowitz, Seth Rosenthal, Jennifer Carman, Jennifer Marlon, and Arunima Sircar of Yale University, Jagadish Thaker of the University of Auckland, and Yashwant Deshmukh and Guara Shukla of CVoter. All graphics (charts and tables) in the report were created by Liz Neyens of Yale University.



Appendix II : Demographic Tables

Demographics: Table 1

Age of respondent		
Age groups	n (unweighted)	% (weighted)
18-24	725	17
25-34	1311	30
35-44	1211	21
45-54	785	14
55-64	415	13
65+	172	5

Gender of respondent

Gender	n (unweighted)	% (weighted)
Male	2452	52
Female	2160	48
Other	7	0

Respondent's area of residence

Area	n (unweighted)	% (weighted)
Urban	1521	30
Semi-Urban	633	16
Rural	2465	54

Respondent's state of residence

State	n (unweighted)	% (weighted)
Andhra Pradesh	159	4
Assam	155	2
Bihar	390	8
Chattisgarh	101	2
Delhi	67	1
Goa	4	0
Gujarat	145	5
Haryana	152	2
Himachal Pradesh	96	1
Jammu & Kashmir	49	1
Jharkhand	123	2
Karnataka	265	5
Kerala	136	3
Madhya Pradesh	301	6
Maharashtra	307	10
Northeast*	34	1
Orissa	179	4
Punjab	124	2
Rajasthan	259	5
Tamil Nadu	279	7
Telangana	107	3
Union Territories*	8	0
Uttar Pradesh	700	16
Uttarakhand	56	1
West Bengal	423	8

* Northeast includes respondents in Sikkim, Meghalaya, Arunachal Pradesh, Nagaland, Manipur, and Mizoram. Union Territories includes respondents in Chandigarh, Dadra & Nagar Haveli, Kargil, and Pondicherry.

Demographics: Table 2

Language in which survey was conducted

Language	n (unweighted)	% (weighted)
Asamia	155	2
Bangla	423	8
English	38	1
Gujarati	145	5
Hindi	2302	46
Kannada	265	5
Malayalam	136	3
Marathi	307	10
Odiya	179	4
Punjabi	124	2
Tamil	279	7
Telugu	266	8

Up to what level have you studied?

Level of education	n (unweighted)	% (weighted)
Not literate	124	3
Literate without formal schooling	87	2
Literate but below primary	84	2
Primary	983	22
Middle	864	20
Secondary	801	19
Higher Secondary	909	16
Diploma/certificate course	221	4
Graduation	436	10
Post-grad & above	109	3
Don't know	1	0

What is your monthly family income?

Monthly household income	n (unweighted)	% (weighted)
Less than Rs 3000	588	12
Rs 3000-6000	893	17
Rs 6000-10,000	974	17
Rs 10,000-20,000	918	20
Rs 20,000-50,000	696	15
Rs 50,000-1,00,000	224	10
More than Rs 1,00,000	117	5
Can't Say	209	4

Do you own or rent your home

Home ownership status	n (unweighted)	% (weighted)
Own	3558	77
Rent	542	12
Don't know	11	0
No response	508	10

Demographics: Table 3

What is the main source of drinking water for members of your household?

Drinking water source	n (unweighted)	% (weighted)
Tap / Piped into house	1552	36
Tap / Piped into yard/plot	177	4
Public tap / Standpipe (handpump)	1041	21
Tube well / Borehole	677	15
Protected well	247	5
Unprotected well	53	1
Protected spring	17	0
Unprotected spring	4	0
Rainwater	7	0
Tanker truck	36	1
Cart with small tank	13	0
Surface water (river / dam / lake / pond /		
stream / canal / irrigation channel)	65	1
Bottled water / Water bag/sachet	74	2
Community RO plant	46	1
Others	150	3
Don't know	1	0
No response	459	9

Does your household have electricity?

Electricity	n (unweighted)	% (weighted)
Yes	4048	88
No	102	2
No response	469	9

Does your household have an air conditioner?

Air conditioner	n (unweighted)	% (weighted)
Yes	504	13
No	3532	75
Don't know	1	0
No response	480	10
Not applicable (No electricity)	102	2

Does your household have internet access (broadband/cable or mobile phone)?

Internet access	n (unweighted)	% (weighted)
Yes	2860	64
No	1275	27
Don't know	7	0
No response	477	10

Which party did you vote for in 2019 Lok Sabha Elections?

Party	n (unweighted)	% (weighted)
INC/UPA	489	11
BJP/NDA	2194	45
Others	1550	35
No response	386	9

Demographics: Table 4

What type of fuel does your household mainly use for cooking?

Cooking fuel	n (unweighted)	% (weighted)
Wood	1229	25
Straw / grass	123	3
Dung	162	3
Electricity	6	0
Propane or natural gas	2472	56
Coal	17	0
Oil	4	0
Solar	3	0
Charcoal	8	0
Kerosene / paraffin	3	0
Other	119	3
No response	470	9
Not applicable	3	0
	0	0
What type of a house do you live in?		
House type	n (unweighted)	% (weighted)
Hut/jhuggi jhopri (walls are		
plastic/polythene/mud		
/grass/leaves/stones/unburnt brick etc.)	247	6
Kutcha house (walls are wood/bamboo/mud and		
roof is thatched/wooden/tin/asbestos sheets etc.)	900	19
Kutcha-pucca (walls are pucca materials such as		
burnt brick but roof is not concrete/cemented)	782	16
Mixed houses (some rooms are pucca and other		
rooms are kutcha-pucca or kutcha)	335	7
Duese independent house (wells and reaf are both	000	/
Pucca independent nouse (wans and roor are both		
made up of pucca materials and built on separate	1701	20
	1721	39
Flat (more than one house shares the same plot		
and the building is at least double storied)	166	4
No response	468	9
What is your religion?		
Religion	n (unweighted)	% (weighted)
Hindu	3973	80
Muslim	388	14
Iain	16	0
Animism	5	0
Christian	101	2
Sikh	101	2
Buddhist/Neo Buddhist	15	1
No religion	3	1
Other	0	0
Don't know	0 7	0
L'OH C MIUW	/	0

What is your caste group?

Caste group	n (unweighted)	% (weighted)
Scheduled Tribe	352	7
Scheduled Caste	626	12
Other Backward Classes	1639	35
Upper Caste/Forward Caste	1816	39
Can't Say	47	1
No response	139	5

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