

# ECO ANXIETY REPORT

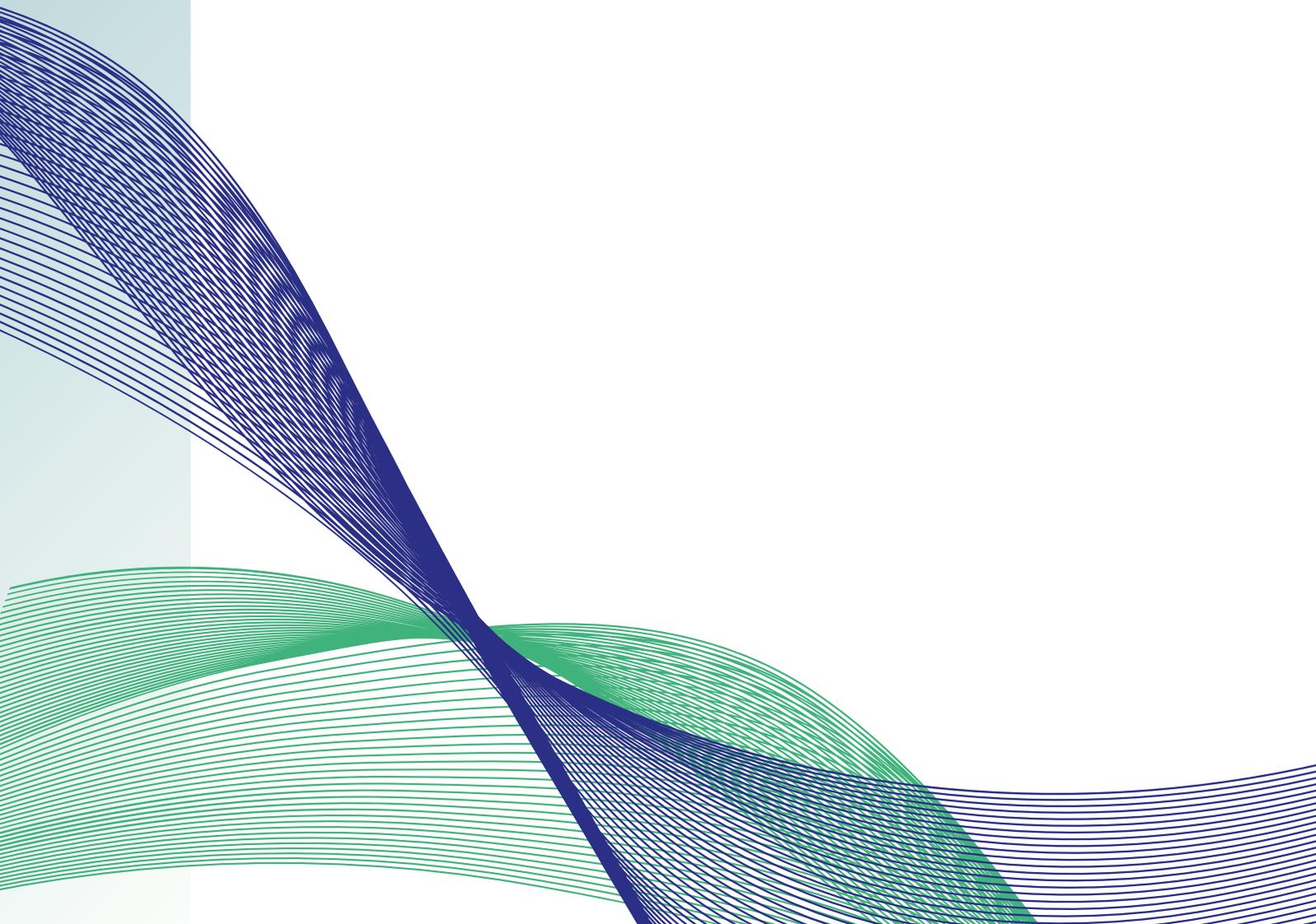
INDIA

2023

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## Note from Iris Sustainable Development

Anxiety relating to a multitude of ecological crises, or eco-anxiety, is a subject of growing research significance. The main idea of the first report series is to establish an international overview of eco-anxiety rates in 20 countries utilizing the HEAS scale and correlate these rates with variables of geographical location (urban, rural), education as well as the type of experiencing climate crisis (indirectly via the media or public discourse).

More precisely, the main objectives of this report series is to:

- create an international overview of eco-anxiety rates in 20 countries
- contribute to the growing body of knowledge around to what extent the climate crisis affects mental health identifying possible differentiation on eco-anxiety determinants
- raise awareness on the impact of climate crisis on mental health

The target group of the Indian national report are citizens of India and/or people (ages 18-50) that are/ have been experiencing climate change in the country.

## Climate change impacts in India

India's climate can be classified as a hot tropical country, except the northern states of Himachal Pradesh and Jammu & Kashmir in the north and Sikkim in the northeastern hills, which have a cooler, more continental influenced climate. According to India Meteorological Department (2022), the annual mean land surface air temperature averaged over India during 2022 was +0.51°C above the long-term average (1981-2010 period). The year 2022 was the fifth warmest year on record since nationwide records commenced in 1901. However, this is lower than the highest warming observed over India during 2016 (anomaly of +0.71°C) and higher than the previous year 2021 (anomaly of +0.44°C). The all India mean temperatures during the winter (January to February) season was normal with anomaly of -0.04°C while during other seasons, it was above normal ( pre-monsoon (March to May) season (anomaly of ±1.06°C), monsoon (June to September) season (anomaly of +0.36°C) and post-monsoon (October to December) season (anomaly of +0.52°C).

### Greenhouse gas emissions

India's greenhouse emissions rate dropped by a faster-than-expected 33% in 14 years as renewable energy generation rose and forest cover increased, according to two officials privy to latest assessment made for submission to the United Nations (Reuters, 2023). According to IMF, India has made significant progress towards meeting its emissions reductions targets under the Paris Agreement, but with current policies total GHG emissions would nonetheless increase by more than 40 percent by 2030. While a modest increase in short-term emissions may be necessary to meet poverty reduction and energy security goals, a more rapid scaling up of current policies could help lower emissions considerably over the medium-term and bring India closer to a path to net zero by 2070 (2023).

### Extreme weather events

In the vast tapestry of India, where landscapes range from the towering Himalayas to the sun-kissed beaches of the southern coast, the past decade has unfolded as a narrative of climate change, marked by a symphony of extreme weather events. From deadly heatwaves to devastating floods, the subcontinent grapples with the complex interplay of a changing climate and its impact on diverse communities.

## Climate change impacts in India

One of the most striking examples of this climatic shift occurred in 2015 when India faced a relentless heatwave, described as the fifth deadliest in the world's recorded history. With temperatures soaring above 50 degrees Celsius (122 degrees Fahrenheit) in some regions, the heatwave claimed thousands of lives, highlighting the profound impact of rising temperatures on vulnerable populations. Cities like Delhi and Hyderabad faced severe water shortages, and the event underscored the urgent need for adaptive measures to cope with the intensifying heat.

The southern state of Kerala faced a different extreme in 2018 when it experienced unprecedented rainfall that triggered devastating floods. The monsoon rains, intensified by climate change, led to overflowing rivers, landslides, and widespread destruction. The picturesque town of Kozhikode, known for its serene landscapes, found itself submerged, and the event highlighted the vulnerability of coastal regions to changing precipitation patterns.

In 2022, the Center for Science and Environment, a New Delhi-based public interest research and advocacy organization, tracked extreme weather events in India. It found out that India on the whole experienced extreme weather events on 314 out of the 365 days, meaning that at least one extreme weather event was reported in some part of India on each of these days. The report concluded that these events caused more than 3,000 deaths in 2022, affected about 2 million hectares (4.8 million acres) of crop area, killed more than 69,000 animals used as livestock and destroyed roughly 420,000 houses (Murali Krishnan for DW, 2023). In 2022, extreme weather events cumulatively claimed 3,026 human lives, affected at least 1.96 million hectares (ha) crop area, destroyed 423,249 houses and killed over 69,899 animals. The year was also the fifth warmest for the country, according to the India Meteorological Department (IMD). Heavy rains, floods and landslides was the most recurring extreme weather event type (reported on 214 days in the year), followed by lightning and storms (185 days), heatwaves (66 days), coldwave / cold days (46 days), cloudbursts (11 days), snowfall (4 days) and cyclones (3 days). The analysis relies on the number of days per extreme weather event as it shows the spread of such events across the year.

## Survey results

### LOCATION



Urban Area



Rural Area



### EDUCATION

Elementary School Degree  8%

High School's Degree  59%

Bachelor's Degree  29%

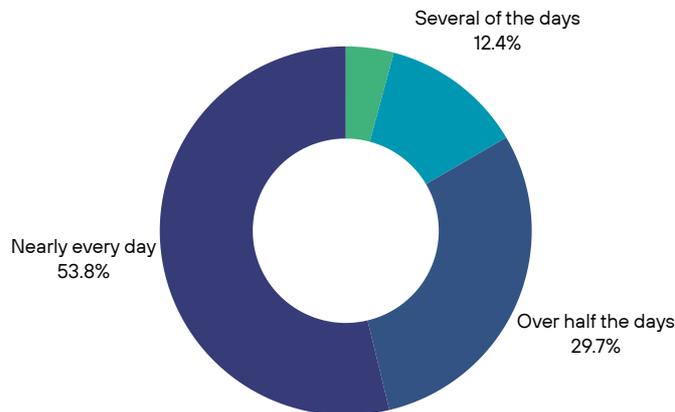
Master's Degree or higher  12%

## Survey results: The Hogg Scale

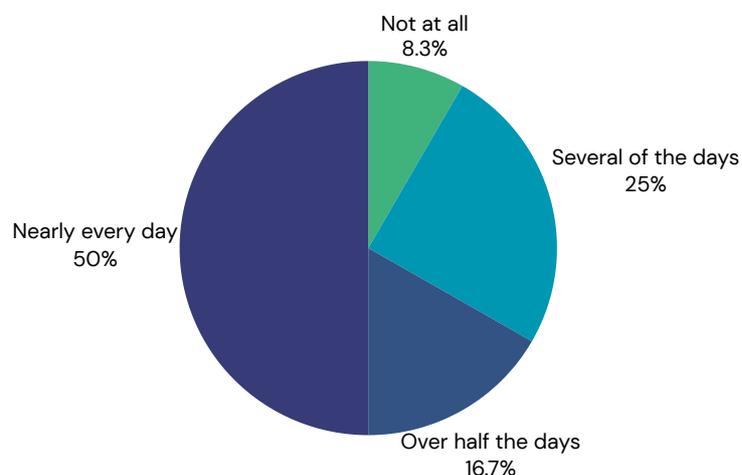
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

*Response scale: 0 = not at all, 1 = several of the days, 2 = over half the days, 3 = nearly every day.*

### Feeling nervous, anxious or on edge



### Not being able to stop or control worrying

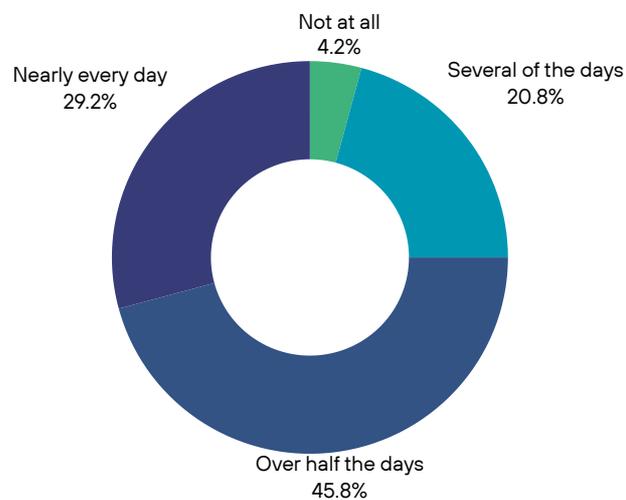


## Survey results: The Hogg Scale

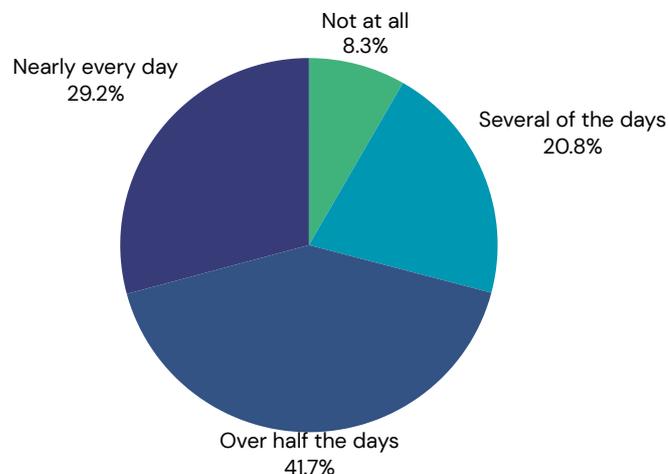
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### Worrying too much



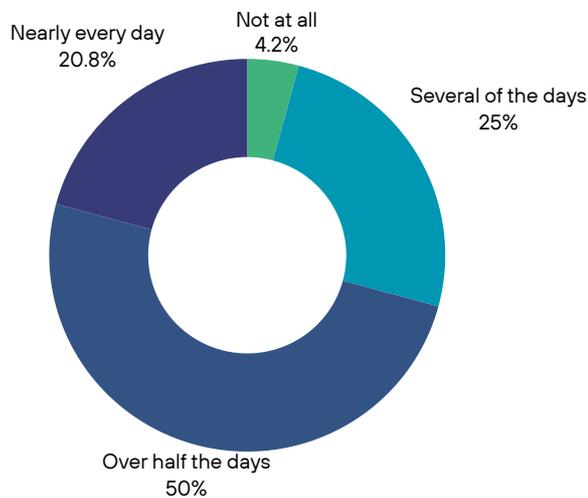
### Feeling afraid



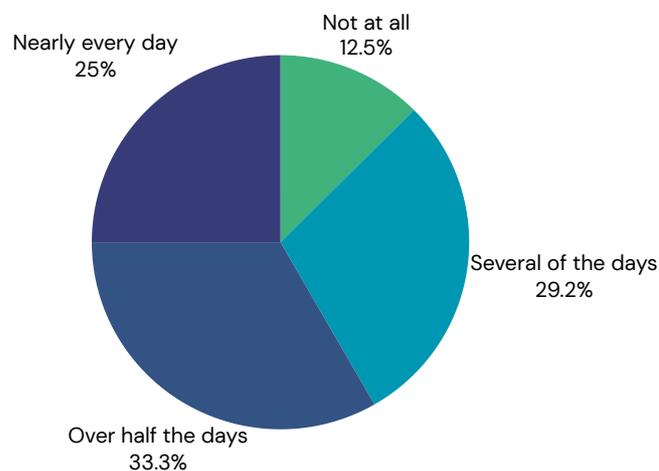
## Survey results: The Hogg Scale

*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

Unable to stop thinking about future climate change and other global environmental problems



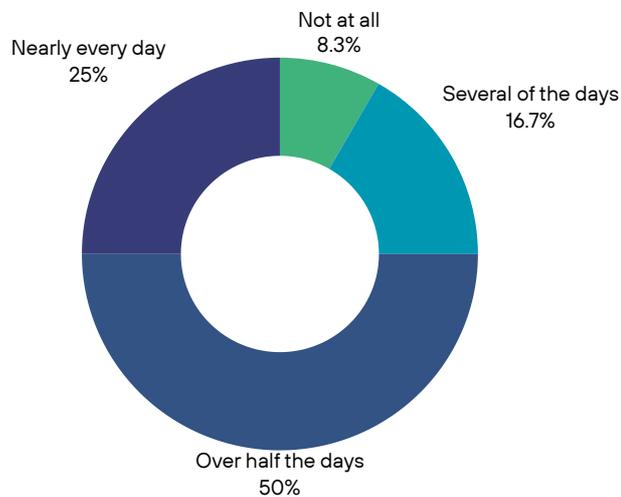
Unable to stop thinking about past events related to climate change



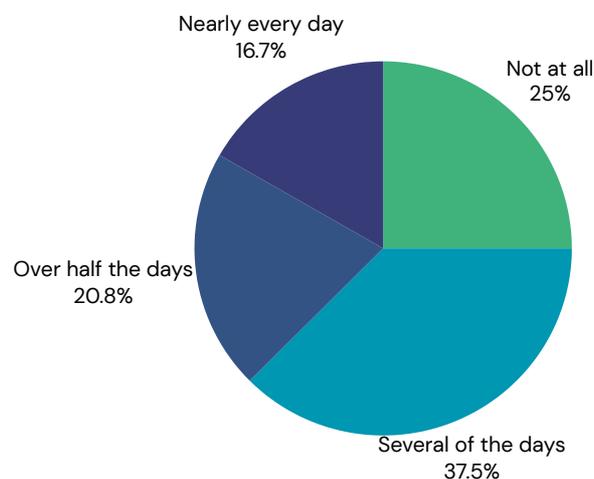
## Survey results: The Hogg Scale

*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

### Unable to stop thinking about losses to the environment



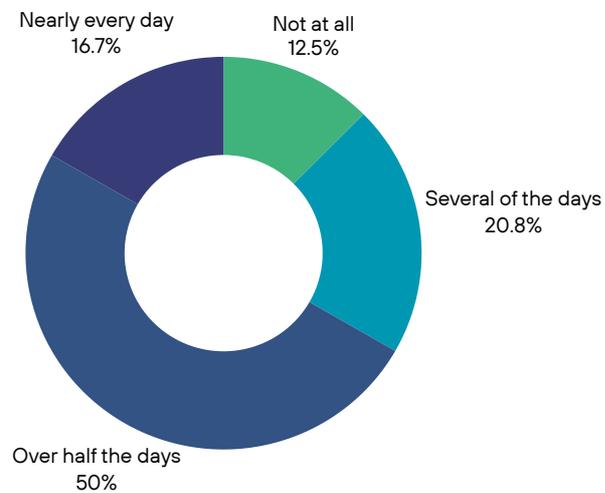
### Difficulty sleeping



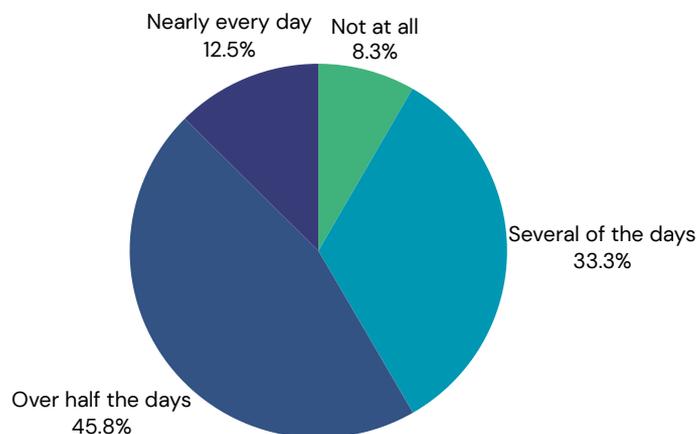
## Survey results: The Hogg Scale

*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

### Difficulty enjoying social situations with family and friends



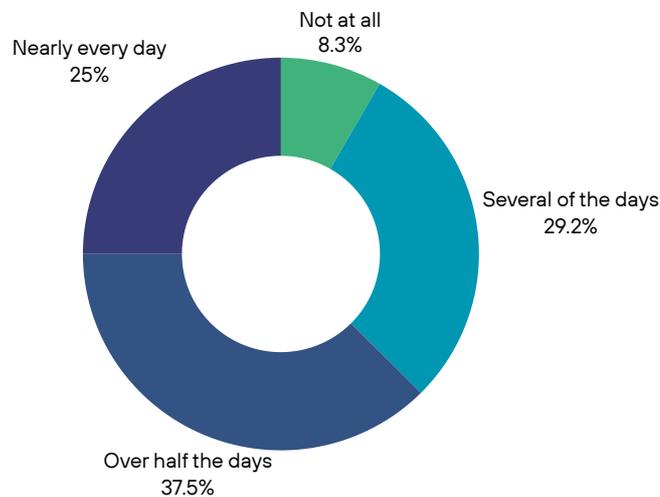
### Difficulty working and/or studying



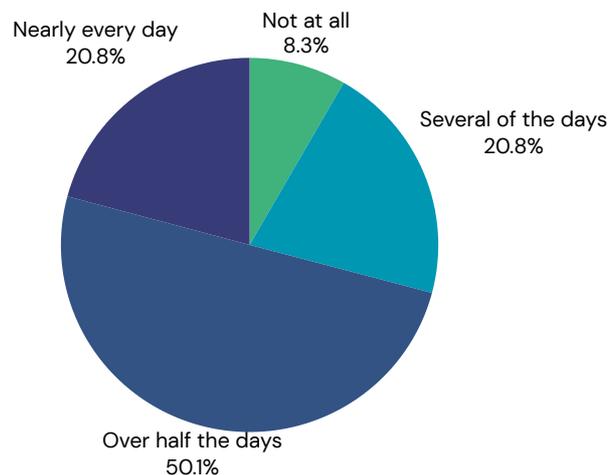
## Survey results: The Hogg Scale

*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

Feeling anxious about the impact of your personal behaviours on the earth



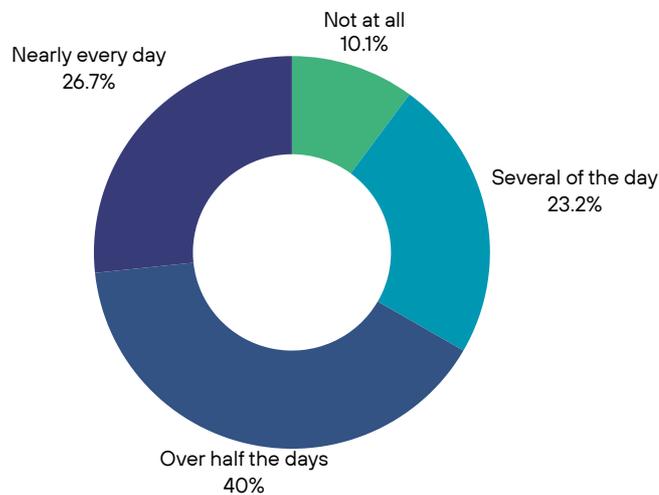
Feeling anxious about your personal responsibility to help address environmental problems



# Survey results: The Hogg Scale and Beliefs about climate change

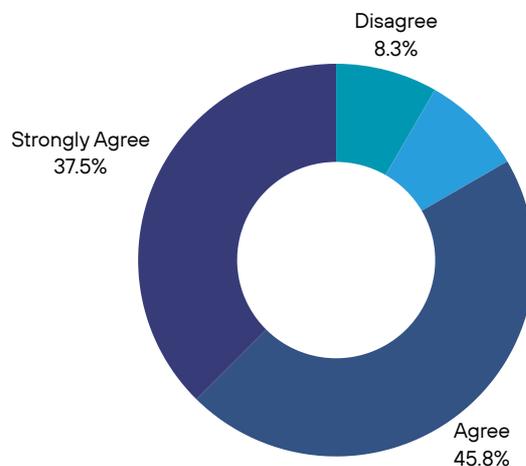
*“Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?*

Feeling anxious that your personal behaviours will do little to help fix the problem



## Beliefs about Climate Change

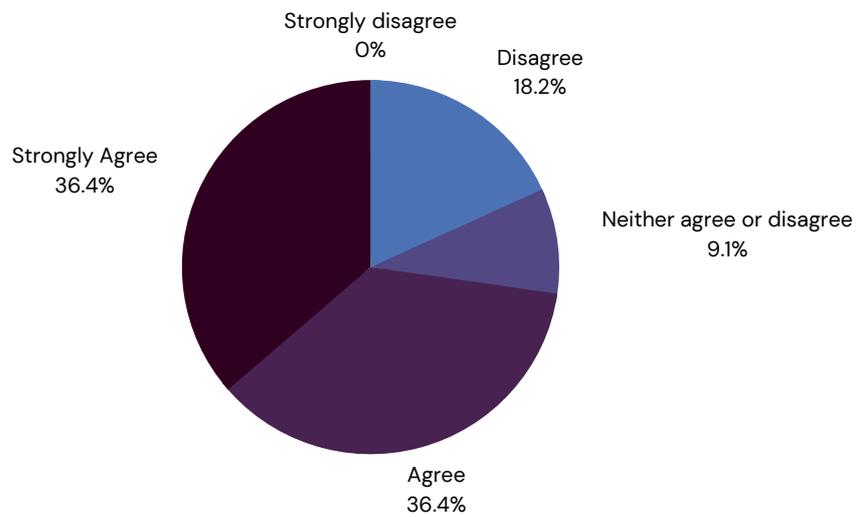
Climate change is real



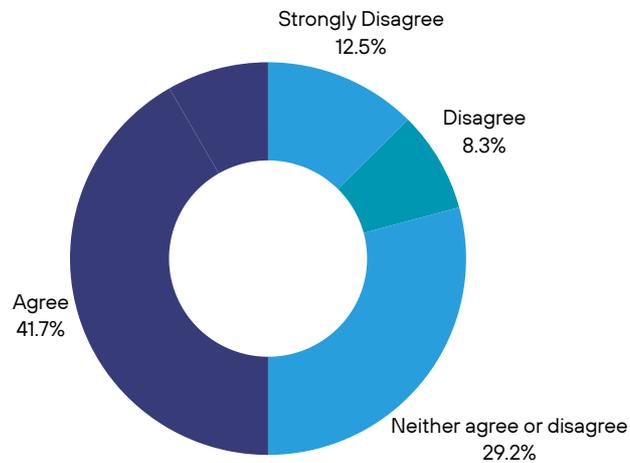
# Survey results: Beliefs about climate change

## Beliefs about Climate Change

### Climate change is caused by humans

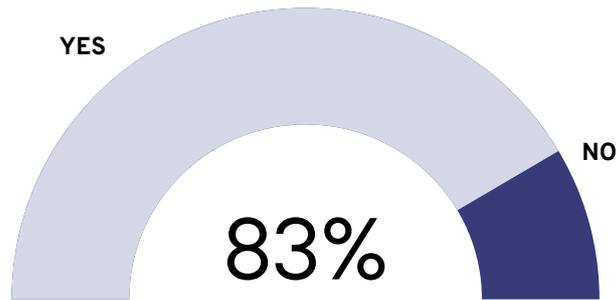


### Climate change is reversible

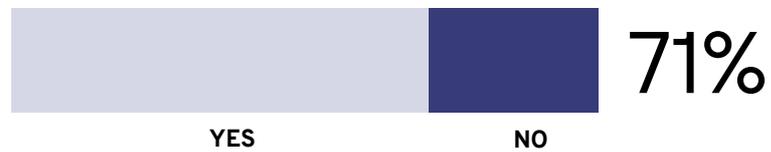


## Survey results: Beliefs about climate change

Do you have direct experience of environmental crisis?



I am experiencing climate crisis indirectly via the media or public discourse



Which climate disaster made you feel nervous (in your country or globally), if any



## Key Conclusions

Our research reveals a notable prevalence of eco-anxiety among the Indian population, reporting varying degrees of eco-anxiety. This underscores the significance of the issue and the need for further investigation and intervention.

In terms of the interplay between eco-anxiety and specific variables no significant differences in eco-anxiety rates were observed across various demographics. It is important that both the respondents with urban and rural residents are exhibited same levels of eco-anxiety compared to their rural counterparts. Additionally, while a slight connection with education was observed, we address that eco-anxiety can be experienced via media and public discourse, since the 71% has expressed that is experiencing eco-anxiety indirectly. This indicates that the media and information consumption play a substantial role in shaping eco-anxiety levels since participants who reported frequent exposure to alarming environmental news or content experienced higher levels of eco-anxiety. Simultaneously, the study found a strong interplay between eco-anxiety and heightened concerns about environmental issues. Respondents who expressed high levels of eco-anxiety consistently cited factors and events such as wildfires, floodings, insufficient waste management, air and water pollution as well as droughts as major sources of distress.

The findings of this research underscore the urgency for policymakers to address eco-anxiety as a public health concern. Developing sustainable environmental policies, educational campaigns, and psychological support services can help mitigate eco-anxiety and its associated mental health issues. This study provides a foundation for future research on eco-anxiety. However, further investigations into the long-term consequences of eco-anxiety, the effectiveness of interventions, and potential policy changes are essential for a comprehensive understanding of this emerging issue.

In conclusion, our research highlights the significant eco-anxiety rates in India and the need for multidisciplinary efforts to address this concern. Addressing eco-anxiety is not only crucial for the mental well-being of individuals but also for the sustainable future.

**Disclaimer:**

This report provides an intention of the eco-anxiety rates in the country and cannot be generalised since the survey is not responded by a representative sample comparing to the country's population.

## References

Deutsche Welle. (2023). Climate Change in India: A Growing Environmental Crisis. DW News. Retrieved from <https://www.dw.com/en/climate-change-in-india-a-growing-environmental-crisis/a-66190451#:~:text=2022%20extreme%20weather%20events&text=It%20found%20out%20that%20India,on%20each%20of%20these%20days>.

Down To Earth. (2023). 3,026 People, 2 Million Ha Crops: How 314 Days of Extreme Weather Events Affected India in 2022. Retrieved from <https://www.downtoearth.org.in/news/natural-disasters/3-026-people-2-million-ha-crops-how-314-days-of-extreme-weather-events-affected-india-in-2022-87181>

India Meteorological Department. (2022). Statement on the Climate of India 2022 [PDF]. Retrieved from <https://www.macrotrends.net/countries/ITA/italy/carbon-co2-emissions>

International Monetary Fund. (2023, March 6). India Can Balance Curbing Emissions and Economic Growth. IMF News. Retrieved from <https://www.imf.org/en/News/Articles/2023/03/06/cf-india-can-balance-curbing-emissions-and-economic-growth>

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