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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 Israeli national report are citizens of Israel and/or people (ages 18-50) that are/have been experiencing climate change in the country.





# Climate change impacts in Israel

Israel lies in a transition zone between the hot and arid southern part of West Asia and the relatively cooler and wetter northern Mediterranean region. The northern part of Israel is characterized by a Mediterranean climate, while the southern part is arid, with a narrow, semi-arid strip in between. Israel's climate is characterized by hot summers and mild winters. Rainfall varies significantly across the country and from year to year. Average annual rainfall volume during 2000-2009 was 5.78 Billion Cubic Meters (BCM) (World Bank, 2023).

#### Greenhouse gas emissions

Israel's greenhouse gas emissions profile is characterized by a unique set of challenges. The nation's energy sector has historically been a major contributor, heavily reliant on fossil fuels. However, in a transformative shift, Israel has made substantial investments in renewable energy sources, with a focus on solar power. The Negev Desert, basking in abundant sunlight, has become a testing ground for solar energy projects, positioning Israel as a regional leader in harnessing the power of the sun to reduce its dependence on traditional fossil fuels.

Transportation is another significant contributor to Israel's emissions, fueled by a growing population and urbanization. In response, the government has implemented policies to encourage the adoption of electric vehicles, with initiatives such as tax incentives and charging infrastructure development. These efforts aim to not only reduce emissions but also position Israel as a hub for innovation in sustainable transportation.

The share of fossil fuel combustion amounted to 78.9 percent of all greenhouse gas emissions in Israel. In comparison, the second largest share, fluorinated gases, stood at 7.6 percent of all gases emitted that year. Wastewater accounted for just 0.8 percent. The total amount of greenhouse gas emissions that year reached 77,415 metric tons. (Statista, 2023)



### Climate change impacts in Israel

#### Extreme weather events

Over the past decade, Israel, perched on the cusp of the Middle East, has become a stage for a climatic drama unfolding in unpredictable acts. From severe droughts to intense heatwaves and flash floods, the nation grapples with a changing climate that challenges not only its environmental resilience but also the delicate balance of a region already marked by aridity and complexity.

One of the most compelling chapters in Israel's climate narrative is the persistent drought that has gripped the region. In the early 2010s, Israel faced an alarming water crisis as the Sea of Galilee, a critical freshwater source, reached dangerously low levels. The prolonged drought not only strained water resources but also posed existential threats to agriculture and exacerbated tensions over water allocation among neighboring nations. Israel's response involved innovations in water conservation technologies, such as drip irrigation, and desalination plants along its Mediterranean coastline to secure a more sustainable water future.

Simultaneously, the nation has grappled with a series of scorching heatwaves that have pushed temperatures to unprecedented highs. In 2015, a heatwave dubbed "Lucifer" swept across the region, with temperatures soaring above 40 degrees Celsius (104 degrees Fahrenheit). The extreme heat not only posed health risks to the population but also strained energy resources as demand for cooling soared. The frequency and intensity of these heatwaves challenge Israel's traditional resilience strategies and prompt a reevaluation of urban planning and infrastructure to adapt to the new normal of an increasingly warming climate.

Flash floods, a paradoxical consequence of arid climates experiencing sudden bursts of intense rainfall, have also punctuated Israel's recent weather narrative. In 2018, the Negev Desert witnessed a rare phenomenon as torrents of water cascaded through arid canyons, transforming dry riverbeds into rushing streams. The flash floods, while providing a temporary reprieve to water scarcity, also highlighted the vulnerability of certain regions to extreme and erratic weather events.

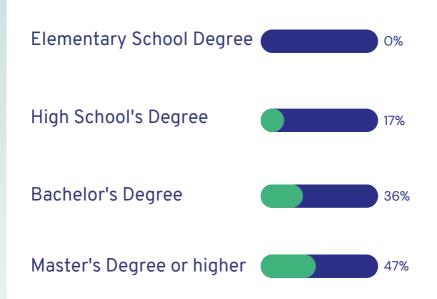
The ecological balance of Israel's unique landscapes has not been immune to the impacts of climate change. The Red Sea, a vital marine ecosystem, has experienced rising sea temperatures and coral bleaching events, posing threats to biodiversity and the livelihoods of communities dependent on marine resources



# Survey results

# LOCATION Urban Area 65% Rural Area 35%

#### **EDUCATION**

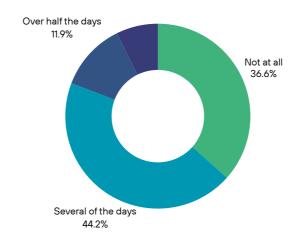




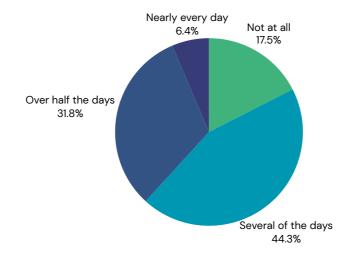
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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

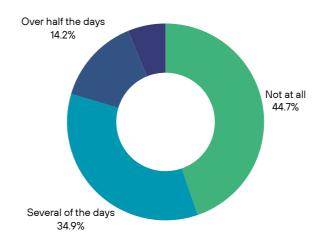




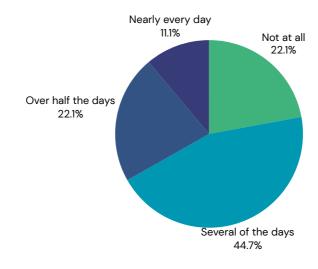
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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

#### Worrying too much



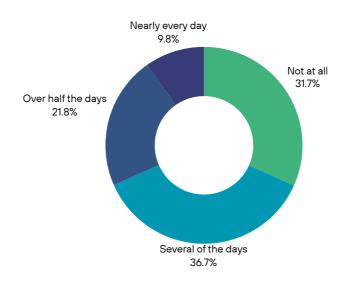
#### Feeling afraid



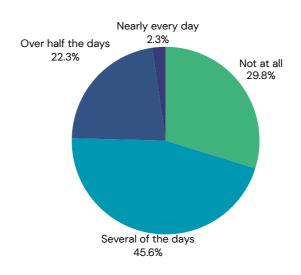


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



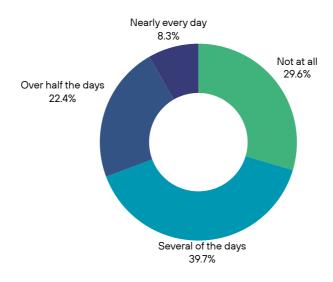
Unable to stop thinking about past events related to climate change



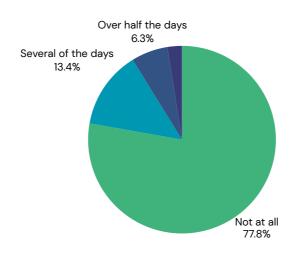


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



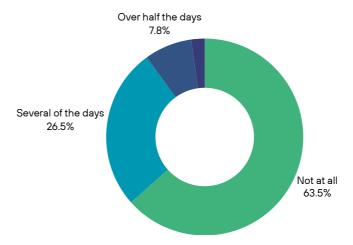
#### Difficulty sleeping



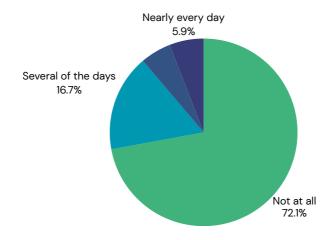


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

#### Difficulty enjoying social situations with family and friends



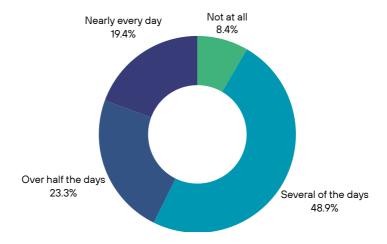
#### Difficulty working and/or studying



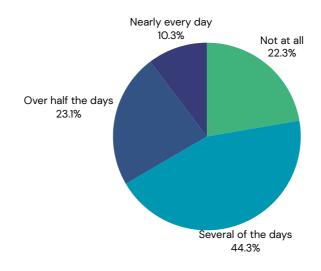


"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



Feeling anxious about your personal responsibility to help address environmental problems

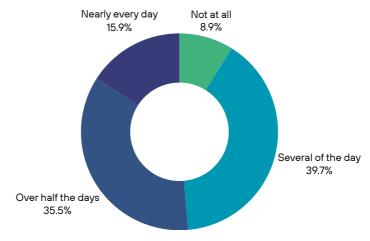




# Survey results: The Hogg Scale and Beliefs about climate change

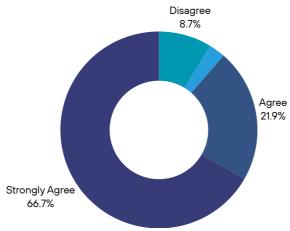
"Over the last 2 weeks, how often have you been bothered by the following problems, when thinking about climate change and other global environmental conditions (e.g., global warming, ecological degradation, resource depletion, species extinction, ozone hole, pollution of the oceans, deforestation)?

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



Beliefs about Climate Change

Climate change is real

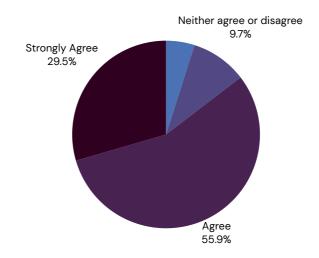




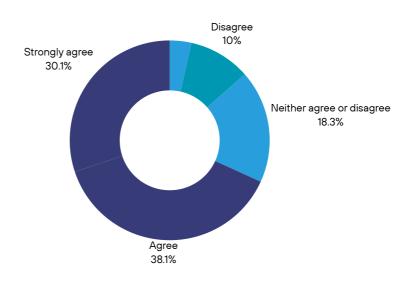
# Survey results: Beliefs about climate change

Beliefs about Climate Change

#### Climate change is caused by humans



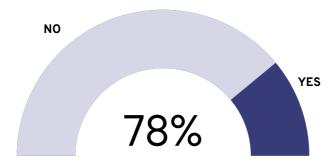
#### Climate change is reversible





# 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 discource



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

	Floodings	
Wildfires		
Droughts	Heatwaves	



#### **Key Conclusions**

Our research reveals a notable prevalence of eco-anxiety among the Israeli 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, significant differences in eco-anxiety rates were observed across various demographics. Notably, the geographical location of participants was strongly linked with eco-anxiety. It is important that the 65% of the respondents are urban residents and they are exhibited higher 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 84% 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, droughts and heatwaves as major sources of distress.

The findings of this research underscore the urgency for policymakers to address ecoanxiety as a public health concern. Developing sustainable environmental policies, educational campaigns, and psychological support services can help mitigate ecoanxiety 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 Israel 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.



#### References

Statista. (2023). Share of Greenhouse Gas Emissions in Israel by Source. Retrieved from https://www.statista.com/statistics/1389519/share-of-greenhouse-gas-emissions-in-israel-by-source/

World Bank. (2023). Climate Data Historical - Israel. Climate Knowledge Portal. Retrieved from

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