INTERNATIONAL PUBLIC OPINION ON CLIMATE CHANGE Extreme Weather and Vulnerability 2023 YALE PROGRAM ON Meta Climate Change Communication

Table of Contents

Introduction	2
Executive Summary	3
1. Extreme Weather and Climate Change	5
2. Preparedness for Extreme Weather	11
3. Extreme Weather Recovery and Support	14
Appendix I: Survey Method	16
Appendix II: Results by Region	20
Appendix III: Exposure by Hazard (Large Maps)	92
Appendix IV: Climate Change Attribution by Hazard (Large Maps)	98
Appendix V: Climate Change Attribution by Hazards	104







Introduction

This report presents results from an international survey, conducted in a partnership between the Yale Program on Climate Change Communication (YPCCC), Data for Good at Meta, and Rare's Center for Behavior & the Environment, investigating public climate change knowledge, beliefs, attitudes, policy preferences, and behavior among Facebook users. The survey included responses from 139,136 Facebook monthly active users (18 years of age or older). Responses were collected from 187 countries and territories worldwide, including 107 individual countries and territories and 3 geographic groups comprising 80 additional countries and territories (for a total of 110 "areas," which are the unit of analysis).

This report focuses on Facebook users' experiences with and preparedness for extreme weather and climate-related hazards. It is based on data from the subset of countries and territories within the survey that are classified as "low per-capita emissions and income" based on both their below-average percapita CO₂ emissions and low per-capita income. This subset includes 150 countries and territories (totaling 73 "areas" as the unit of analysis), with a total of 99,453 observations. Interview dates: August 3 – September 3, 2023. The YPCCC research team was supported by the MacArthur Foundation, the Schmidt Family Foundation, King Philanthropies, and the Bezos Earth Fund.

Cite as:

Leiserowitz, A., Verner, M., Goddard, E., Wood, E., Carman, J., Kioko, L., Ordaz Reynoso, N., Thulin, E., Rosenthal, S., Marlon, J. & Buttermore, N. (2024). International Public Opinion on Climate Change: Extreme Weather and Vulnerability, 2023. New Haven, CT: Yale Program on Climate Change Communication and Data for Good at Meta.

For all media and other inquiries, please email:

Yale Program on Climate Change Communication:

Lisa Fernandez (lisa.fernandez@yale.edu) Michaela Hobbs (michaela.hobbs@yale.edu)

Data for Good at Meta:

Eric Porterfield (ecp@meta.com)

Rare's Center for Behavior & the Environment:

Zach Lowe (zlowe@rare.org)

Cover photo by Dhana Kencana / Climate Visuals

¹ The complete list of countries and territories surveyed, including the countries and territories included in each geographic group, is provided in Appendix I.







Executive Summary

This report describes self-reported public exposure to and preparedness for extreme weather disasters among Facebook users in 73 countries, territories, and geographic groups (hereafter referred to as "areas") that are classified as "low-emissions" based on both their below-average per-capita CO₂ emissions and low per-capita income. Because of their lower incomes and their geographic locations, these countries are more vulnerable to the impacts of climate change and less responsible for producing the emissions that cause climate change. Overall, these 73 areas represent 150 countries and territories. The survey was developed by the Yale Program on Climate Change Communication, Data for Good at Meta, and Rare's Center for Behavior & the Environment, and was fielded by Meta from August 3 – September 3, 2023. Among the key findings at the global level:

Extreme Weather and Climate Change

- Experiences of extreme weather: Majorities in all countries and territories reported experiencing an extreme weather event. Respondents in Puerto Rico and Uruguay (both 98%), as well as Costa Rica, Dominican Republic, and El Salvador (all 96%) were the most likely to say they had experienced at least one extreme weather event. Respondents in Congo DRC (80%), Yemen (78%), and Angola (76%) were the least likely to say so.
- Experiences of long periods of unusually hot weather: Respondents in nearly all areas were more likely to say they had recently experienced long periods of unusually hot weather than other hazards. Respondents reported experiencing unusually hot weather the most often in 62 out of 73 areas.
- Experiences of different types of extreme weather: Respondents in Uzbekistan (77%), El Salvador (69%), and Puerto Rico (68%) were the most likely to say they had most recently experienced long periods of unusually hot weather. Respondents in Uruguay (70%) were the most likely to say they had most recently experienced drought. Respondents in Serbia (57%) were the most likely to say they had most recently experienced severe weather. Floods, wildfires, and rising sea levels were also noted by respondents around the world, but to a lesser extent.
- Attribution of extreme weather to climate change: After selecting the hazard they had experienced most recently, respondents were then asked how much they thought climate change contributed to that hazard. Most respondents both experienced a hazard *and* said that climate change contributed either "a great deal" or "a moderate amount" to it.



Preparedness for Extreme Weather

- Individual and household preparedness: Respondents in Taiwan (76%), El Salvador (72%), and Azerbaijan (71%) are the most likely to say they and anyone else in their household are either "not that prepared" or "not at all prepared" for extreme weather. In contrast, respondents in Laos (24%), Cambodia (18%), and Vietnam (15%) are the least likely to say they are unprepared.
- **Perceived preparedness of others:** Respondents in Panama (84%), El Salvador (81%), and Turkey (81%) are the most likely to say the people closest to them are not prepared for extreme weather. In contrast, respondents in Laos (44%), Thailand (43%), and Vietnam (33%) are the least likely to say so.
- Perceived expectations of preparedness: Respondents in Romania (62%), Puerto Rico and Vietnam (both 60%), and the Philippines (57%) are the most likely to say the people closest to them think that the respondents themselves should be prepared for extreme weather. In contrast, respondents in Turkey (27%), Azerbaijan (24%), Armenia (22%), Albania (21%), and Taiwan (18%) are least likely to say so.

Extreme Weather Recovery and Support

- Recovering from an extreme weather event: Respondents in Uzbekistan (59%), Bosnia and Herzegovina (56%), and Bulgaria (55%) are the most likely to say it would take a year or more for their household to recover from an extreme weather event. In contrast, respondents in Thailand (22%), Benin (16%), and Indonesia (15%) are the least likely to say so.
- Social support in the event of extreme weather: Respondents in Morocco and Lebanon (both 44%), and Pakistan (42%) are the most likely to say they have no relatives or friends who they could count on for help after an extreme weather event. In contrast, respondents in Mozambique (11%), Panama (12%), and Puerto Rico (12%) are the least likely to say so.

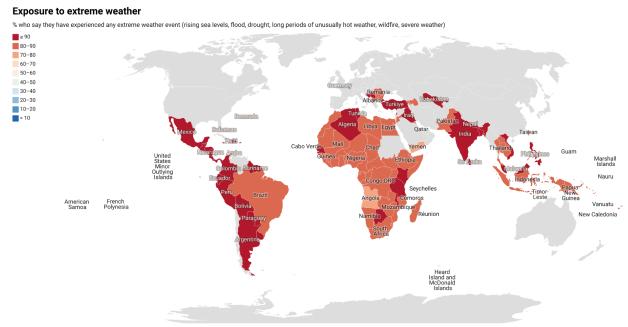


1. Extreme Weather and Climate Change

1.1. Large majorities in every country and territory surveyed said they have experienced an extreme weather event.

A majority of respondents (more than 50%) in all 73 countries, territories, and geographic areas surveyed said they have experienced at least one extreme weather event or hazard (such as rising sea levels, flood, drought, long periods of unusually hot weather, wildfire, and severe weather).

Respondents in Puerto Rico and Uruguay (both 98%), as well as Costa Rica, Dominican Republic, and El Salvador (all 96%) were the most likely to say they had experienced an extreme weather event or hazard. Respondents in Congo DRC (80%), Yemen (78%), and Angola (76%) were the least likely to say so.



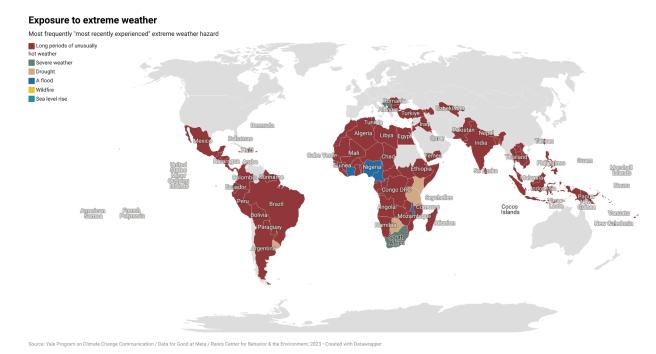




1.2. Nearly everywhere, respondents were most likely to say they had experienced long periods of unusually hot weather.

Respondents in nearly all areas were more likely to say they had recently experienced long periods of unusually hot weather than any other hazard. Respondents selected this response the most often in 62 out of 73 areas.

Respondents in four areas (Cameroon, Côte d'Ivoire, Malawi, and Nigeria) were most likely to say they had most recently experienced a flood. Respondents in four areas (Botswana, Kenya, Tanzania, and Uruguay) were most likely to say they had most recently experienced drought, and respondents in three areas (Bosnia and Herzegovina, Serbia, and South Africa) were most likely to say they had most recently experienced severe weather.

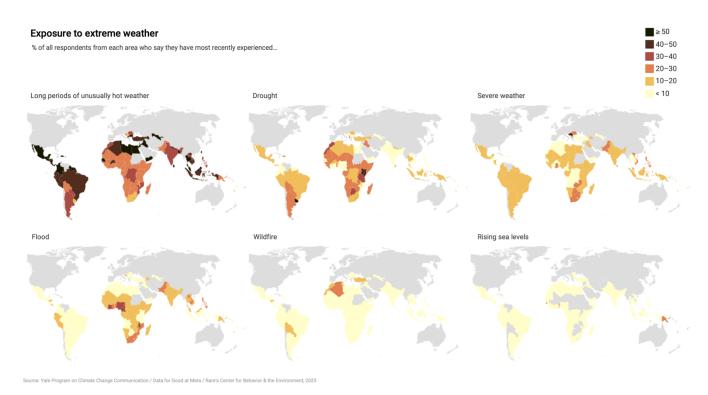




As noted above, respondents in 62 out of 73 areas surveyed were most likely to say they had experienced long periods of unusually hot weather, with outright majorities in 27 areas saying so (see Appendix II for larger maps by hazard). Respondents in Uzbekistan (77%), El Salvador (69%), and Puerto Rico (68%) were the most likely to say they had most recently experienced long periods of unusually hot weather.

In comparison, a majority in only one area, Uruguay (70%), said they had most recently experienced drought, although many in Kenya (45%) and Morocco (33%) also said so. Similarly, a majority in only one area, Serbia (57%), said they had most recently experienced severe weather, though many respondents in other Balkan nations also said so (Bosnia and Herzegovina, 44%; Romania, 28%).

Floods, wildfires, and rising sea levels were also noted as the most recently experienced hazard, but to a lesser extent. Respondents in Malawi (49%), Côte d'Ivoire (39%), and Cameroon (33%) were the most likely to say they had most recently experienced a flood. Respondents in Algeria (28%), Bolivia (18%), and Turkey (15%) were the most likely to say they had experienced a wildfire. Finally, respondents in the Asian and Pacific Islands group (22%), Benin (11%), and Ghana (9%) were the most likely to say they had experienced rising sea levels.



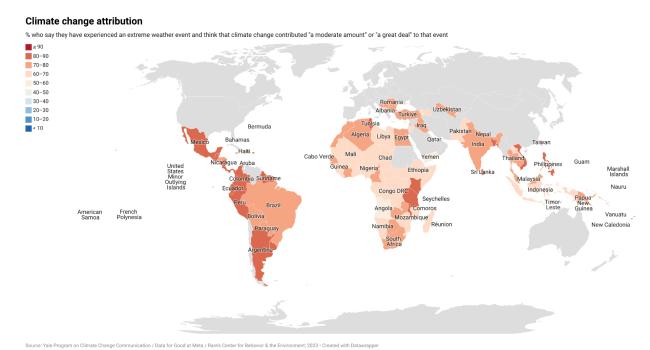
Note: Landlocked countries are excluded from the map of perceived sea-level-rise exposure.



1.3. Majorities in every area said they have experienced an extreme weather event and attributed that event to climate change.

After selecting which hazard they had experienced most recently, respondents were asked how much they thought climate change contributed to that hazard.² Majorities of respondents in all 73 areas surveyed said both that they have experienced at least one extreme weather event or hazard (such as rising sea levels, flood, drought, long periods of unusually hot weather, wildfire, and severe weather; refer to Section 1.1.) and that they thought climate change contributed either "a great deal" or "a moderate amount" to that hazard.

Respondents in Puerto Rico (91%), Costa Rica (89%), and Uruguay, El Salvador, and Panama (all 87%) were the most likely to say they had experienced an extreme weather event and to attribute that event to climate change. Respondents in Libya (61%), Angola (59%), and Yemen (56%) were the least likely to say so.



² As described in our earlier report about this survey, "International Public Opinion on Climate Change, 2023," many respondents said at first that they knew little to nothing about climate change. However, the survey questions included in the current report were asked after all respondents were provided with a one-sentence description of climate change, which informed their subsequent responses.







As described in Section 1.2., majorities of respondents in many surveyed areas said the hazard they had most recently experienced was long periods of unusually hot weather. In line with that, large percentages of respondents in many areas both said that they experienced this hazard and attributed it to climate change. Specifically, respondents in El Salvador, Puerto Rico, and Uzbekistan (all 65%) were most likely to say that they had most recently experienced long periods of extremely hot weather and to say that climate change contributed "a great deal" or "a moderate amount" to it (see Appendix III for larger maps by hazard).3

Uruguay (63%), Kenya (41%), and Tanzania (30%) had the largest percentages of respondents who said they had most recently experienced a drought and that climate change contributed "a great deal" or "a moderate amount" to it.

Serbia (48%), Bosnia and Herzegovina (36%), and Romania (25%) had the largest percentages of respondents who said they had most recently experienced severe weather and that climate change contributed "a great deal" or "a moderate amount" to it.

Malawi (43%), Côte d'Ivoire (33%), and Cameroon (28%) had the largest percentages of respondents who said they had most recently experienced a flood and that climate change contributed "a great deal" or "a moderate amount" to it.

Algeria (21%), Bolivia (12%), and Turkey (12%) had the largest percentages of respondents who said they had most recently experienced a wildfire and that climate change contributed "a great deal" or "a moderate amount" to it.

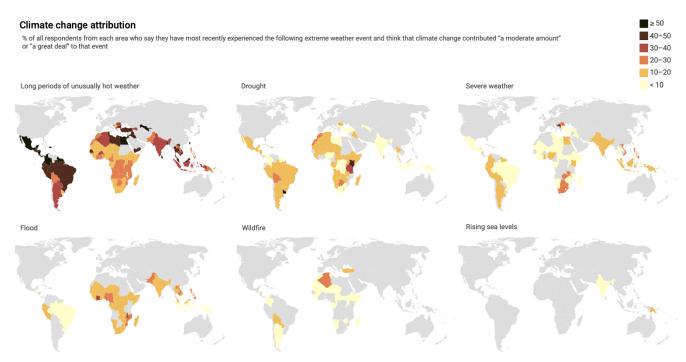
The Asian and Pacific Islands (19%) and India (5%) had the largest percentages of respondents who said they had most recently experienced rising sea levels and that climate change contributed "a great deal" or "a moderate amount" to it.

³ Countries and territories were included in these maps if they met two criteria: (a) at least 5% of total sample size for that country or territory selected the hazard, and (b) this included at least 100 total respondents. Bar charts with detailed attribution results for each hazard in all countries and territories are presented in Appendix V.













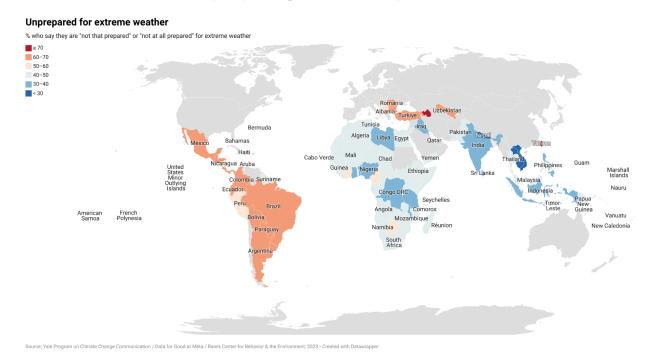


Preparedness for Extreme Weather

2.1. Respondents in many areas say they are not prepared for extreme weather.

Majorities of respondents in 31 out of 73 areas say they and their household are either "not that prepared" or "not at all prepared" for extreme weather. Respondents in Taiwan (76%), El Salvador (72%), and Azerbaijan (71%) are the most likely to say so. In contrast, respondents in Laos (24%), Cambodia (18%), and Vietnam (15%), are the least likely to say so.

Responses indicate clear regional patterns. Respondents in South America report being less prepared than respondents in Sub-Saharan Africa, South Asia, and Southeast Asia. Specifically, majorities in all areas of South America report being either "not that prepared" or "not at all prepared" for extreme weather. In contrast, only three of 41 areas in Sub-Saharan Africa, and only two of 13 areas in South and Southeast Asia, have a majority of respondents who say so.



⁴ Majorities in all areas that were surveyed in Europe (Balkan countries and Armenia) also report being either "not that prepared" or "not at all prepared" for extreme weather.

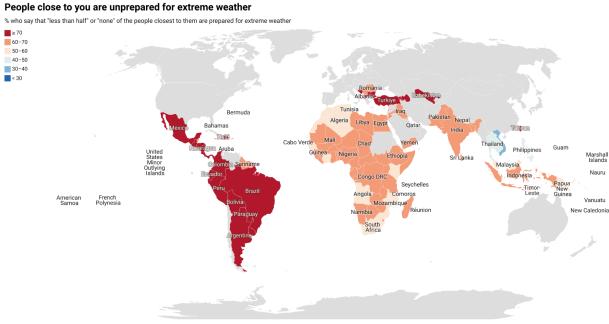






2.2. Many respondents say that the people closest to them are not prepared for extreme weather.

Majorities of respondents in most areas (67 out of 73) say that "less than half" or "none" of the people closest to them are prepared for extreme weather. Respondents in Panama (84%), El Salvador (81%), and Turkey (81%) are the most likely to say so. In contrast, respondents in Laos (44%), Thailand (43%), and Vietnam (33%) are the least likely to say so.

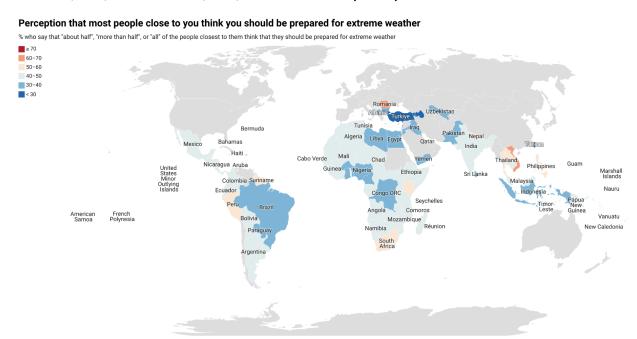






2.3. Relatively few respondents think the people closest to them expect them to be prepared for extreme weather.

Majorities of respondents in 31 out of 73 areas think that "all," "more than half," or "about half" of the people closest to them think that the respondents themselves should be prepared for extreme weather. Respondents in Romania (62%), Puerto Rico and Vietnam (both 60%), and the Philippines (57%) are the most likely to say so. In contrast, respondents in Turkey (27%), Azerbaijan (24%), Armenia (22%), Albania (21%), and Taiwan (18%) are the least likely to say so.









3. Extreme Weather Recovery and Support

3.1. Many respondents say it would take a year or more for their household to recover from an extreme weather event.

Many respondents, and majorities in eight out of 73 areas, say it would take a year or more for their household to recover from an extreme weather event. Respondents in Uzbekistan (59%), Bosnia and Herzegovina (56%), and Bulgaria (55%) are the most likely to say so. In contrast, respondents in Thailand (22%), Benin (16%), and Indonesia (15%), are the least likely to say so.

Source: Yale Program on Climate Change Communication / Data for Good at Meta / Rare's Center for Behavior & the Environment; 2023 • Created with Datawrappe



3.2. Many respondents say they have no relatives or friends who could help them in an extreme weather event.

Many respondents say they have no relatives or friends who they could count on for help if they or anyone in their household were impacted by an extreme weather event, although no area had a majority of respondents who said so. Respondents in Morocco and Lebanon (both 44%) and Pakistan (42%) are the most likely to say so. In contrast, respondents in Panama and Puerto Rico (both 12%) and Mozambique (11%) are the least likely to say so.

Support networks appear to be particularly strong in South America, where the percentages of respondents who say they have no relatives or friends who could help them if they or anyone in their household were impacted by an extreme weather event range from 20 percent in Paraguay to only 15 percent in Peru.

People with no relatives or friends who could help them in an extreme weather event **who say they have no relatives or friends who they could count on for help in an extreme weather event **a 40-50 **a 9-0-40 **a 9-0-90 **a 9-0-



Appendix I: Survey Method

The data in this report are based on a survey of 139,136 Facebook monthly active users, aged 18 and older. Responses were collected from 187 countries and territories worldwide, including 107 individual countries and territories and 3 geographic groups comprising 80 additional countries and territories (for a total of 110 "areas," which are the unit of analysis).

This report includes a data sub-sample of 150 low-emission countries and territories (73 "areas") with 99,453 observations. The countries in this list have both: (1) below global average per-capita emissions (4.4 tons CO2e) and (2) a GNI per-capita that is below the World Bank's criterion for a classification of "high income" (i.e., less than \$12,535 USD). The survey was conducted August 3 – September 3, 2023. Sampled Facebook users received an invitation to answer a short survey at the top of their Facebook News Feed and had the option to click the invitation to complete the survey on the Facebook platform.

The sample was drawn from the population of Facebook monthly active users, defined as registered and logged-in Facebook users who had visited Facebook through the website or a mobile device in the last 30 days. Within each country or territory surveyed, we drew a sample in proportion to publicly available age and gender benchmarks. Sample populations for the geographic groups were drawn in proportion to the population of Facebook users due to lack of publicly available benchmark data. All other countries and territories were sampled in proportion to data from the United Nations Population Division 2019 World Population Projections.

Data for some countries and territories that have smaller populations and/or numbers of Facebook users were combined into "group" scores (i.e., Caribbean, Asian and Pacific Islands, and some countries in Sub-Saharan Africa). Data were then weighed separately for each country, territory, and group using a multi-stage, pre- and post-survey weighting process based on census and nationally representative survey benchmarks, Facebook demographics, and Facebook engagement metrics, balanced to the total number of survey completions.6

This project is a partnership between the Yale Program on Climate Change Communication, Data for Good at Meta, and Rare's Center for Behavior & the Environment. The survey instrument was designed by Anthony Leiserowitz, Seth Rosenthal, Marija Verner, and Jennifer Carman of Yale University, with support by Emily Wood, Natalia Ordaz Reynoso and Nicole Buttermore at Meta; and Erik Thulin at

⁶ Weights were generated in three stages. First, we adjusted for sampling in proportion to age and gender census benchmarks. Second, we adjusted for non-response error using Inverse Propensity Score Weighting (IPSW) on Facebook demographics and Facebook engagement metrics to make the sample more representative of Facebook monthly active users. The Facebook monthly active user sampling frame constitutes a sizable proportion of the global population, but the proportion of adults who use Facebook differs from country to country. To more closely reflect the entire adult population in a country or territory, we used poststratification based on publicly available nationally representative survey benchmarks, using weights from the first stages as inputs. The final weights were balanced to the total number of survey completions.







⁵ The Facebook monthly active users figure is reported in the company's quarterly earnings report found on https://investor.fb.com. As of June 30, 2023, there were 3.03 billion monthly active users globally.

Rare. The survey was fielded by Meta. Survey weights were generated by Nicole Buttermore and Natalia Ordaz Reynoso. The charts and maps were designed by Emily Goddard and Jennifer Marlon of Yale University. The report text was prepared by Anthony Leiserowitz, Marija Verner, Jennifer Carman, Seth Rosenthal, and Leah Ndumi Kioko of Yale University.

Rounding error and tabulation

Percentages are weighted based on general population parameters for each surveyed country and territory.

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., "a lot" + "a moderate amount") are rounded after sums are calculated (e.g., 25.3% + 25.3% = 50.6%, which, after rounding, would be reported as 25% + 25% = 51%).

Sample size for surveyed countries, territories, and groups

Our study collected data from a total of 187 countries and territories,7 including 80 countries and territories that were collapsed into three geographic groups due to sample size (i.e., Caribbean, Asian & Pacific Islands, and Sub-Saharan Africa). In this particular report, we use a data sub-sample of 150 low-emission countries and territories or 73 "areas" with 99,453 observations. The unweighted sample sizes for each country, territory, and group in this data subset are as follows:

- Albania (n = 531)
- Algeria (n = 1,791)
- Angola (n = 1,037)
- Argentina (n = 1,682)
- Armenia (n = 549)
- Asian & Pacific Islands* (n = 2,649)
- Azerbaijan (n = 842)
- Bangladesh (n = 1,642)
- Benin (n = 863)
- Bolivia (n = 1,571)
- Bosnia and Herzegovina (n = 659)
- Botswana (n = 774)
- Brazil (n = 1,526)
- Bulgaria (n = 1,515)

- Burkina Faso (n = 745)
- Cambodia (n = 1,007)
- Cameroon (n = 839)
- Caribbean* (*n* = 1,383)
- Colombia (n = 1,658)
- Congo, Democratic Republic of the (n = 804)
- Costa Rica (n = 1,469)
- Côte d'Ivoire (n = 927)
- Dominican Republic, The (n = 1,295)
- Ecuador (n = 1,443)
- Egypt (n = 1,932)
- El Salvador (n = 1,334)
- Ghana (n = 816)
- Guatemala (n = 1,602)

- Haiti (n = 771)
- Honduras (n = 1,490)
- India (n = 3,793)
- Indonesia (n = 1,767)
- Iraq (n = 2,185)
- Jamaica (n = 603)
- Jordan (n = 2,086)
- Kenya (n = 1,892)
- Kosovo (n = 522)
- Kuwait (n = 906)
- Laos (n = 745)
- Lebanon (n = 1,049)
- Libya (n = 1,168)
- Malawi (n = 1,092)
- Malaysia (n = 1,805)
- Mexico (n = 1,700)

⁸ For the full list of countries, please refer to Appendix I of our previously published "International Public Opinion on Climate Change, 2023" report.







⁷ Samples were drawn from two additional areas (Eritrea and Tuvalu), but no respondents participated in the surveys in these areas, so they are excluded from the final list.

- Morocco (n = 1,347)
- Mozambique (n = 961)
- Nepal (n = 1,534)
- Nicaragua (n = 820)
- Nigeria (n = 1,939)
- North Macedonia (n = 693)
- Pakistan (n = 1,966)
- Panama (n = 852)
- Paraguay (n = 825)
- Peru (n = 1,455)

- Philippines, The (*n* = 1,825)
- Puerto Rico (*n* = 872)
- Qatar (n = 835)
- Romania (n = 1,264)
- Senegal (n = 704)
- Serbia (n = 1,309)
- South Africa (n = 1,547)
- Sri Lanka (*n* = 1,266)
- Sub-Saharan Africa* (n = 4,805)

- Taiwan (n = 1,736)
- Tanzania (n = 809)
- Thailand (n = 2,299)
- Tunisia (n = 1,948)
- Turkey (n = 1,733)
- Uruguay (n = 944)
- Uzbekistan (n = 1,194)
- Vietnam (n = 1,564)
- Yemen (n = 1,069)
- Zambia (n = 879)
- *The 80 countries and territories were collapsed into the three geographic groups as follows:

Asian & Pacific Islands (n = 2,649):

- American Samoa
- Brunei
- Cabo Verde
- Comoros, The
- Cook Islands, The
- Fiii
- French Polynesia
- Guam
- Guinea-Bissau
- Kiribati
- Maldives
- Marshall Islands, The
- Mauritius
- Mayotte
- Micronesia, Federated States of
- Nauru
- New Caledonia
- Northern Mariana Islands, The
- Palau
- Papua New Guinea
- Réunion
- Samoa
- Sao Tome and Principe
- Seychelles

- Solomon Islands
- Timor-Leste
- Tonga
- United States Minor Outlying Islands
- Vanuatu
- Wallis and Futuna

Caribbean (*n*= 1,383):

- Anguilla
- Antigua and Barbuda
- Aruba
- Bahamas, The
- Barbados
- Belize
- Bermuda
- Bonaire, Sint Eustatius and Saba
- Cayman Islands, The
- Curação
- Dominica
- French Guiana
- Grenada
- Guadeloupe
- Guyana
- Martinique
- Saint Kitts and Nevis
- Saint Lucia
- Saint Martin (France)

- Saint Vincent and the Grenadines
- Sint Maarten (Netherlands)
- Suriname
- Turks and Caicos Islands, The
- Virgin Islands (British)
- Virgin Islands (U.S.)

Sub-Saharan Africa (n = 4,805):

- Burundi
- Central African Republic, The
- Chad
- Congo, Republic of the
- Djibouti
- Equatorial Guinea
- Eswatini
- Ethiopia
- Gabon
- Gambia, The
- Guinea
- Lesotho
- Liberia
- Madagascar







- Mali
- Mauritania
- Namibia
- Niger

- Rwanda
- Sierra Leone
- Somalia
- South Sudan

- Togo
- Uganda
- Zimbabwe

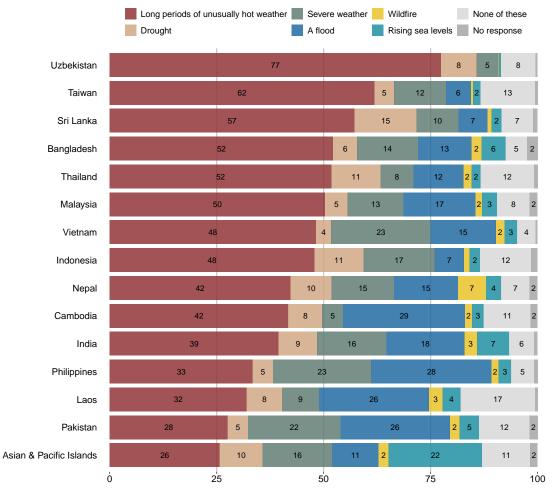


Appendix II: Results by Region

1.1 Exposure to extreme weather

Exposure to extreme weather

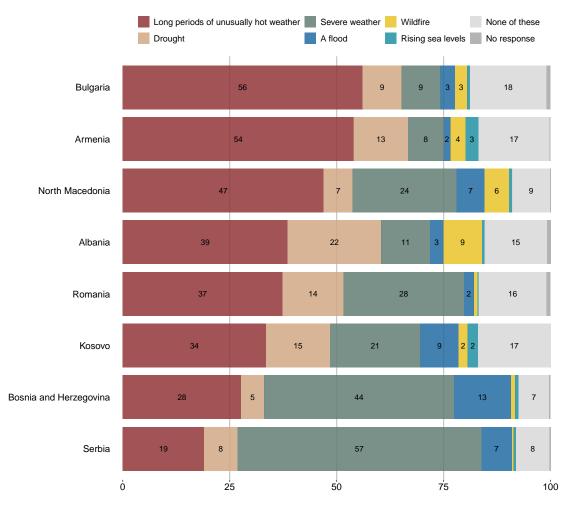
Asia & the Pacific



Which of the following have you most recently experienced?



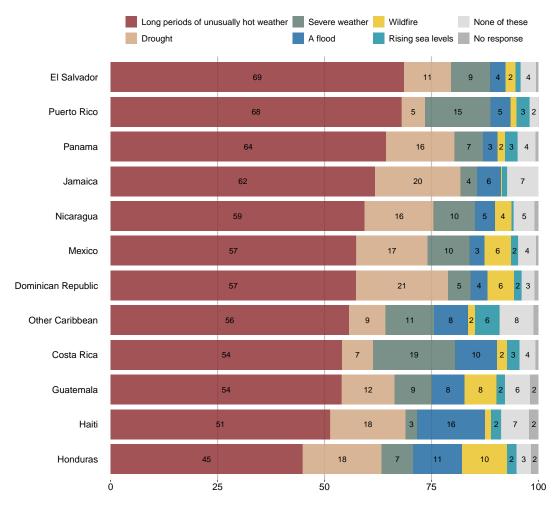
Europe



Which of the following have you most recently experienced?



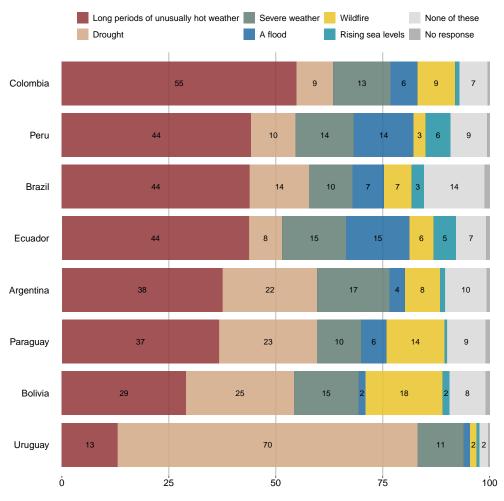
North America, Central America, & the Caribbean



Which of the following have you most recently experienced?



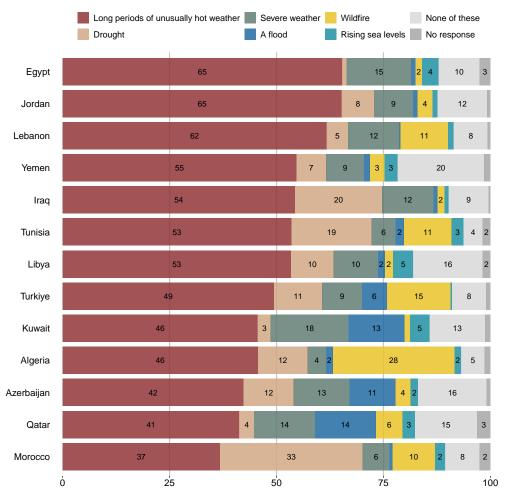
South America



Which of the following have you most recently experienced?



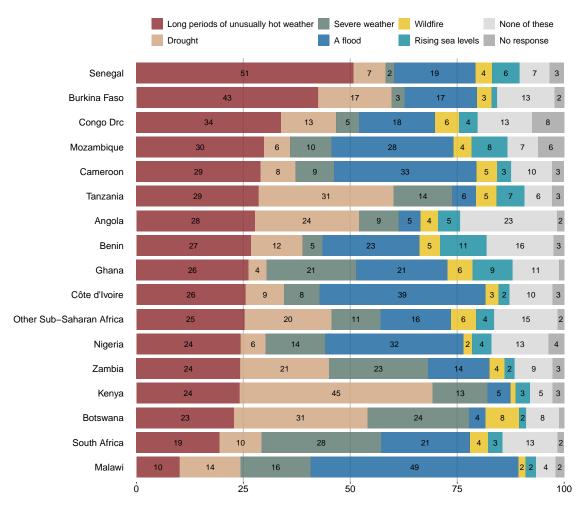
Southwest Asia & North Africa



Which of the following have you most recently experienced?



Sub-Saharan Africa



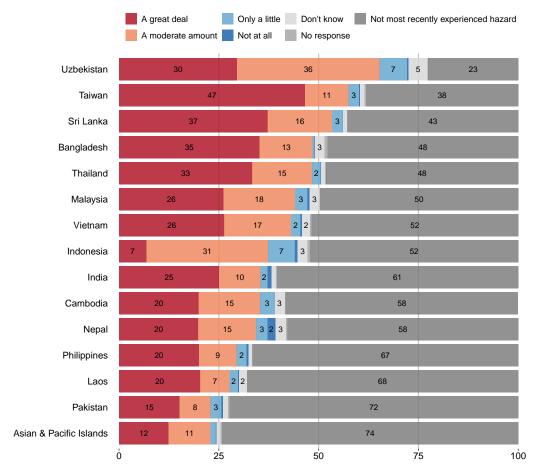
Which of the following have you most recently experienced?



1.2 Climate change attribution

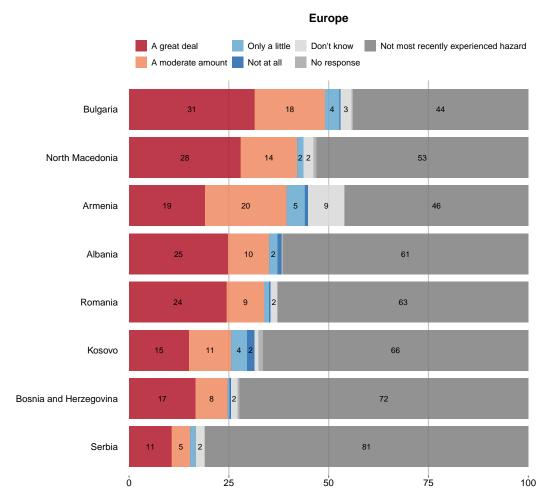
Climate change attribution: Long Periods Of Unusually Hot Weather

Asia & the Pacific



You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?

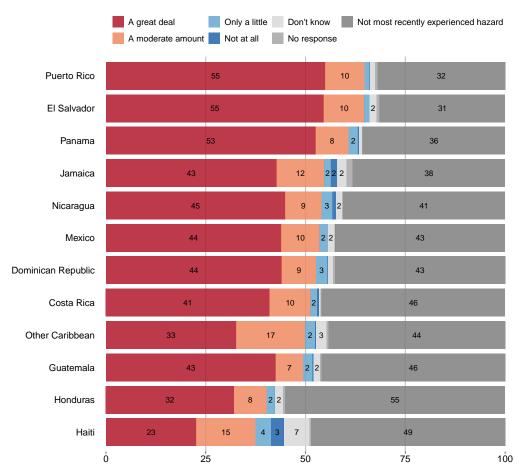




You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?



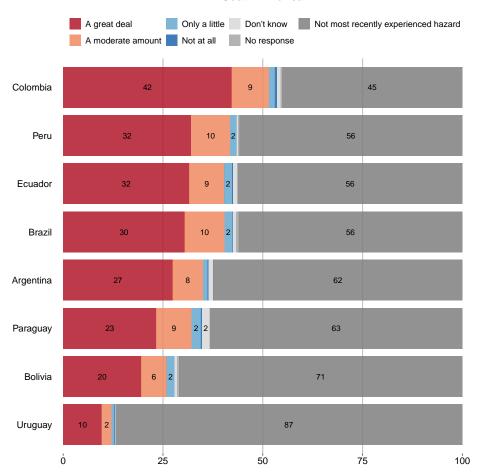
North America, Central America, & the Caribbean



You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?



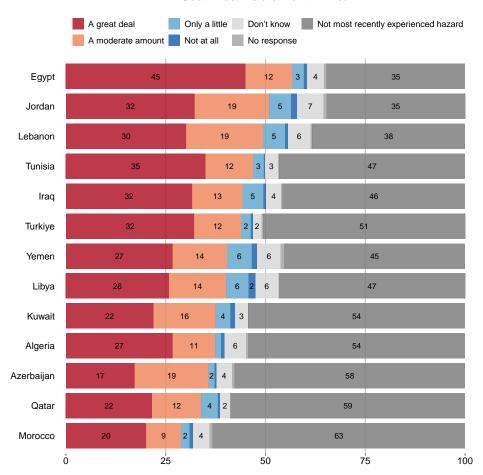
South America



You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?



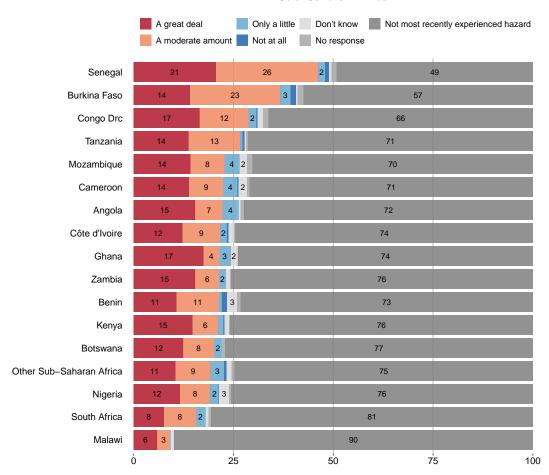
Southwest Asia & North Africa



You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?



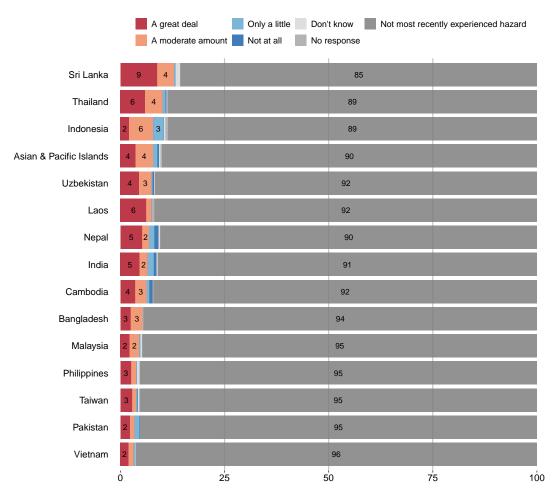
Sub-Saharan Africa



You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?



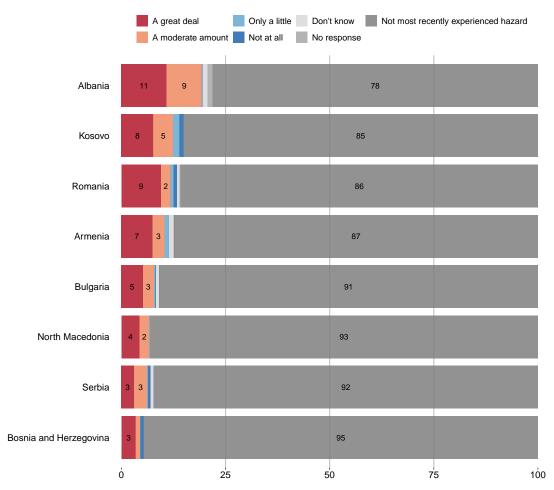
Asia & the Pacific



You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



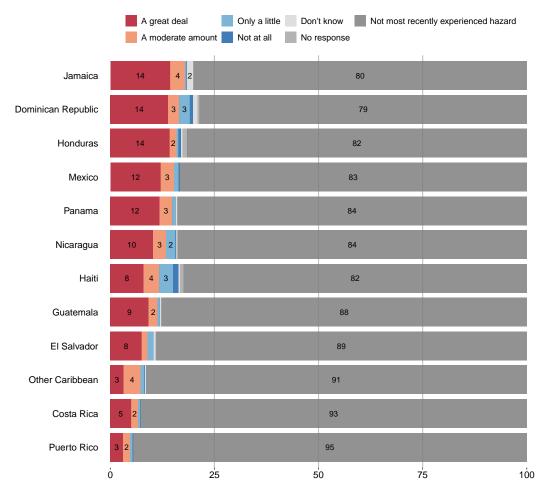
Europe



You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



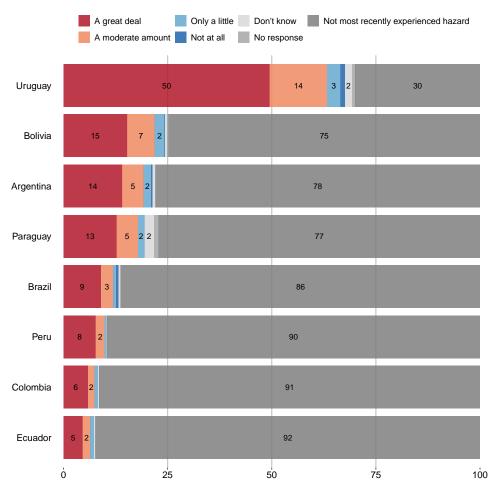
North America, Central America, & the Caribbean



You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



South America

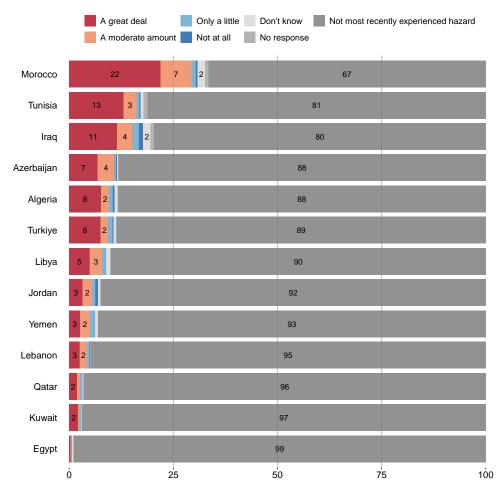


You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



Climate change attribution: Drought

Southwest Asia & North Africa

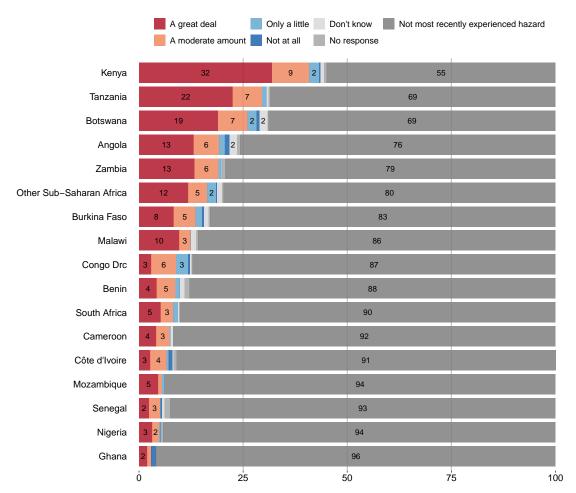


You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



Climate change attribution: Drought

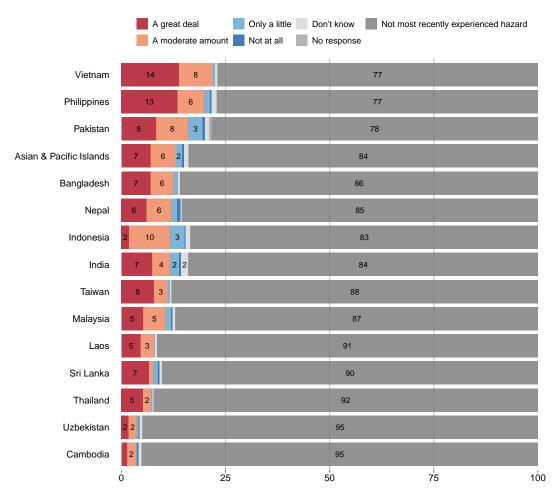
Sub-Saharan Africa



You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



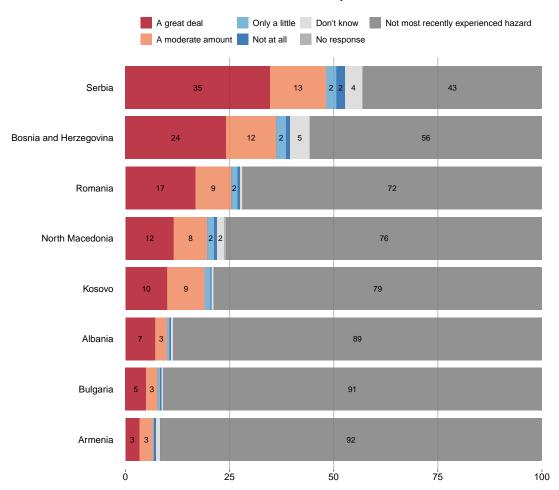
Asia & the Pacific



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



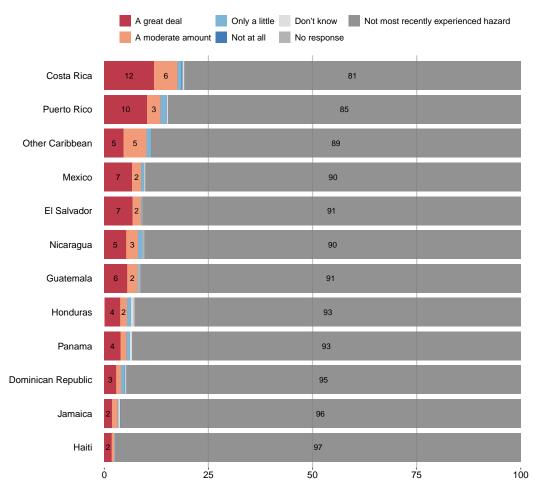
Europe



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



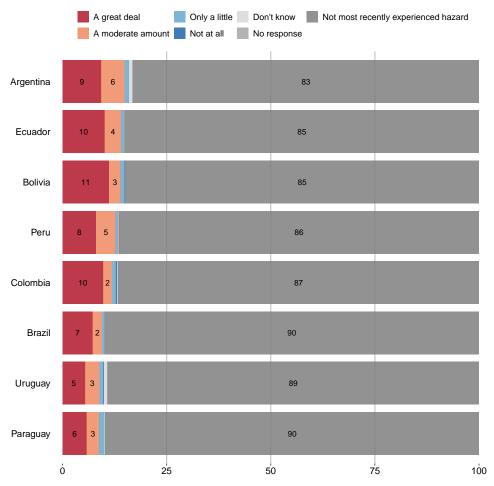
North America, Central America, & the Caribbean



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



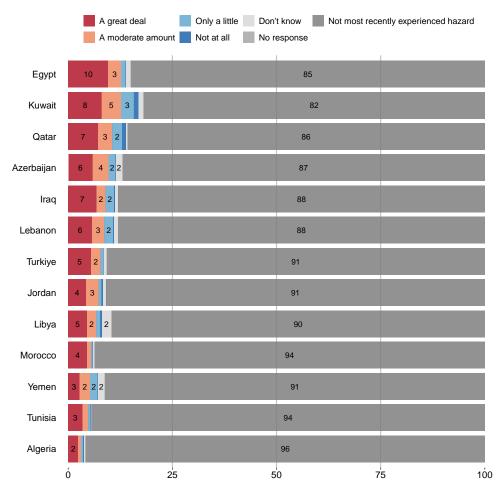
South America



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



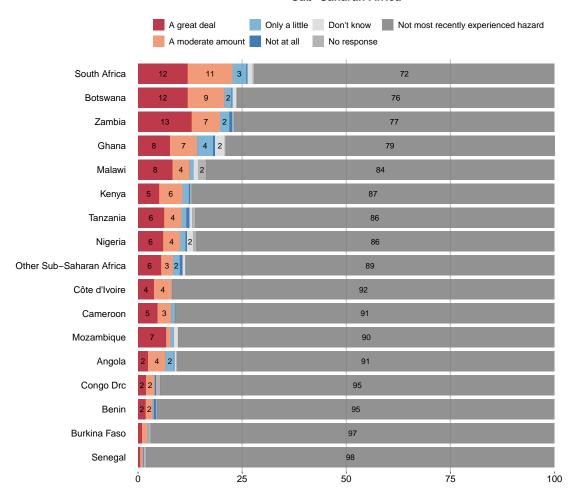
Southwest Asia & North Africa



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



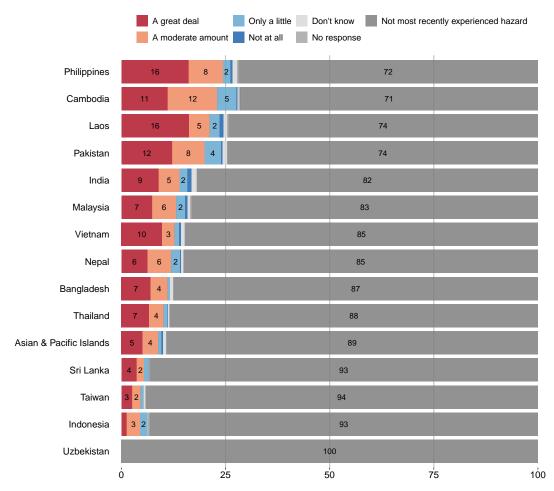
Sub-Saharan Africa



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



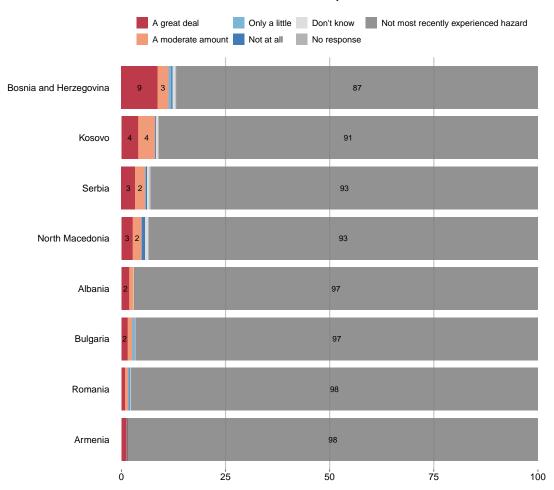
Asia & the Pacific



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



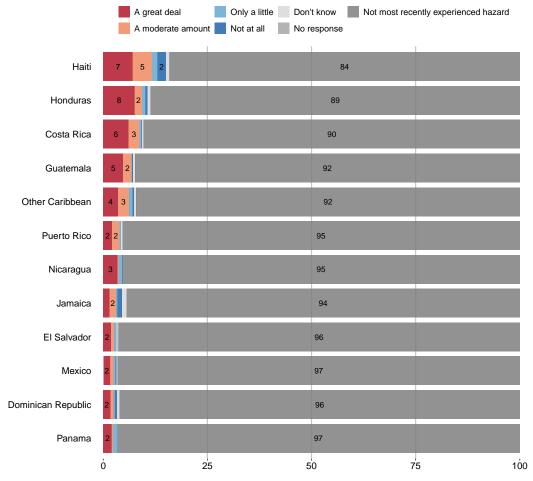
Europe



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



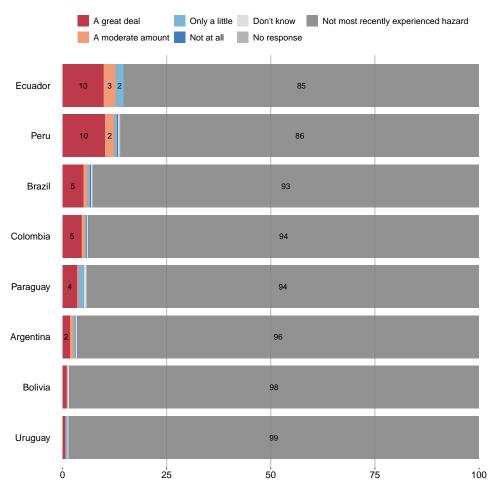
North America, Central America, & the Caribbean



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



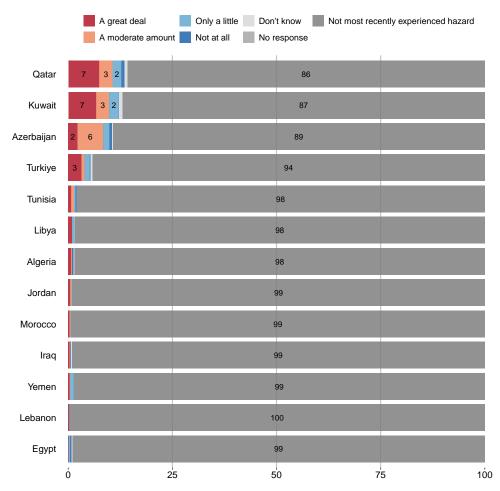
South America



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



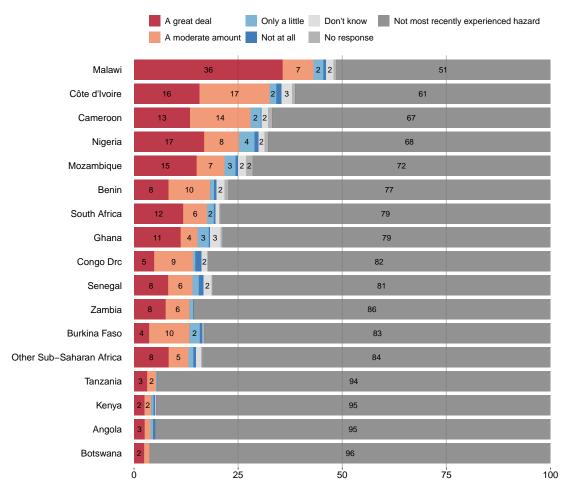
Southwest Asia & North Africa



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



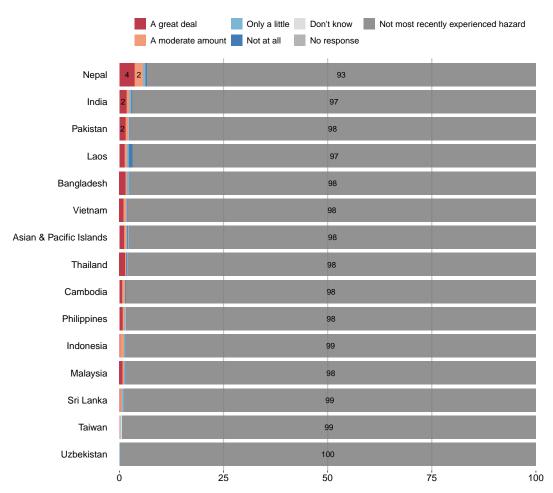
Sub-Saharan Africa



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



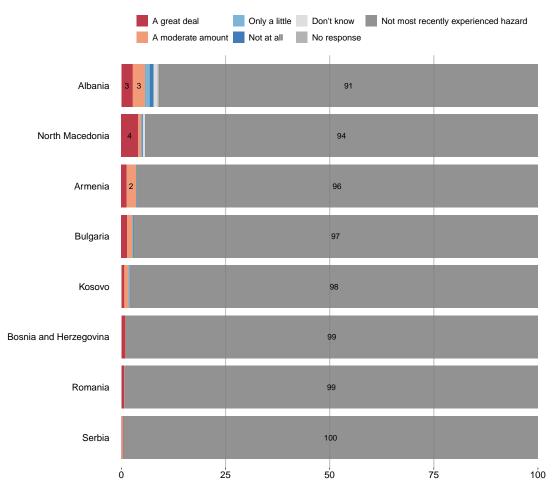
Asia & the Pacific



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



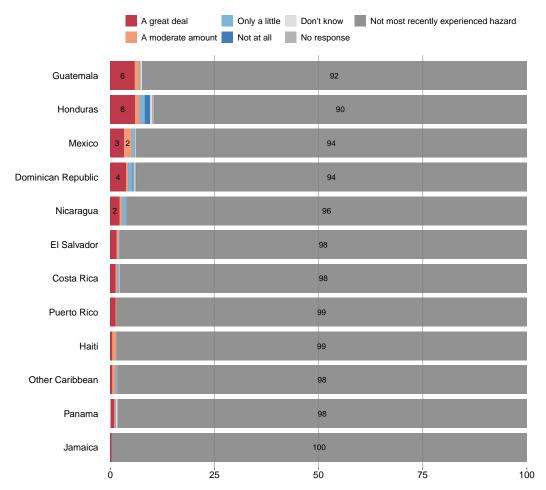
Europe



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



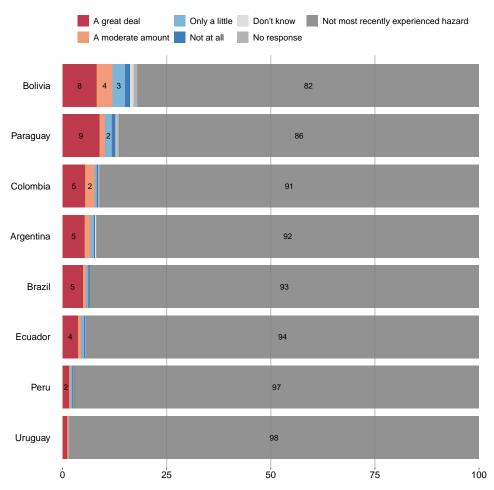
North America, Central America, & the Caribbean



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



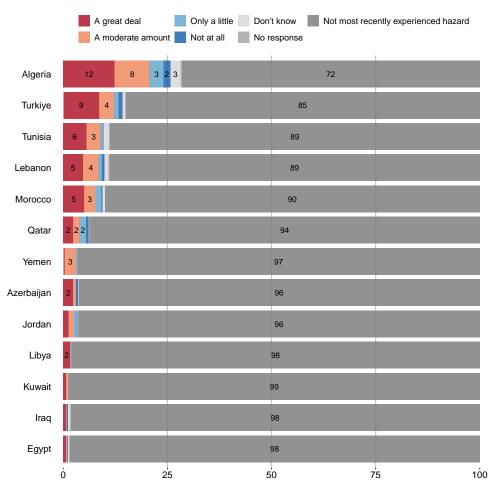
South America



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



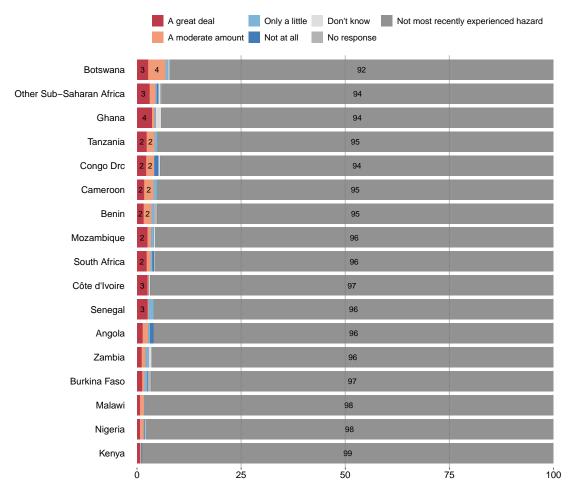
Southwest Asia & North Africa



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



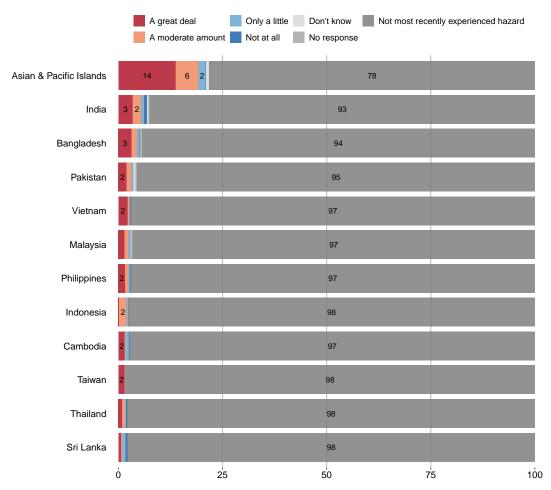
Sub-Saharan Africa



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



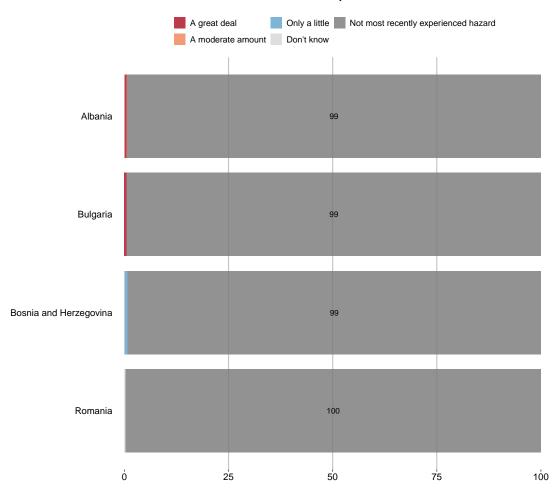
Asia & the Pacific



You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?



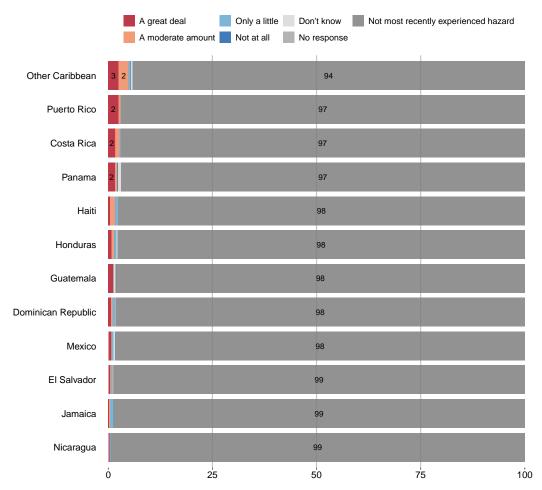
Europe



You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?



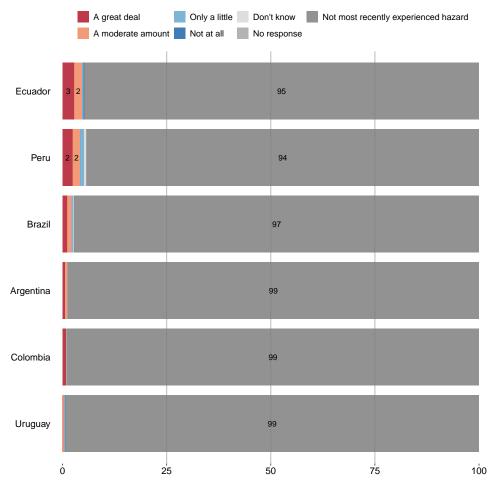
North America, Central America, & the Caribbean



You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?



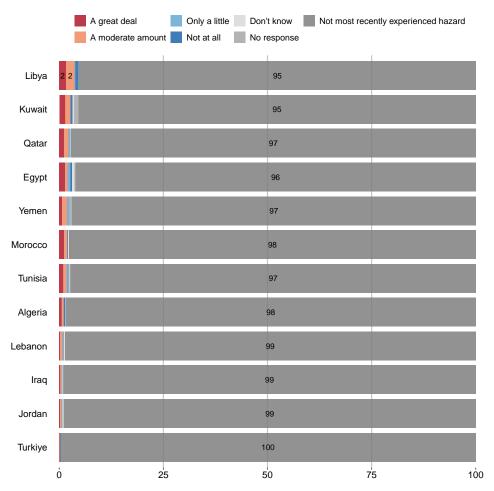
South America



You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?



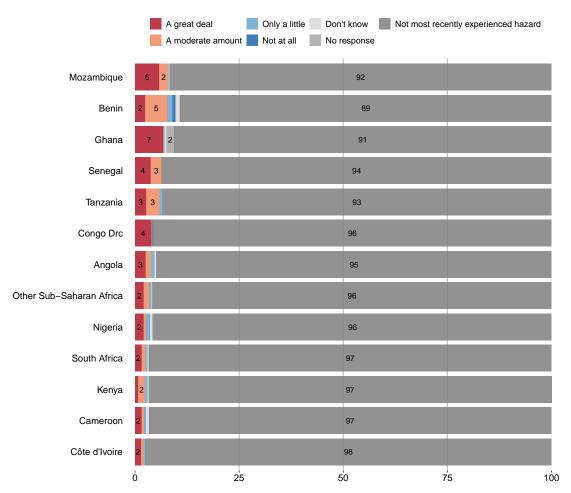
Southwest Asia & North Africa



You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?



Sub-Saharan Africa

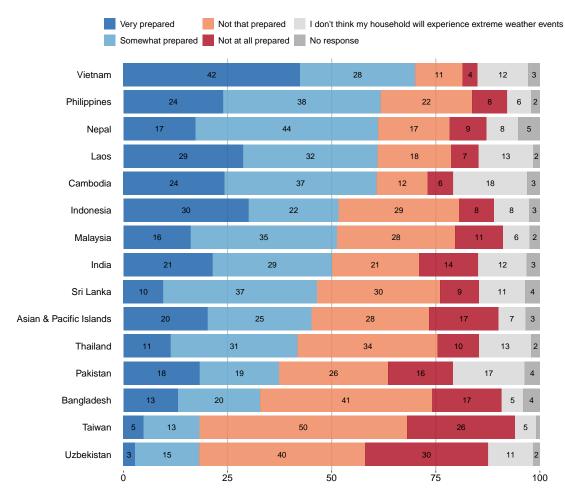


You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?



Preparedness for extreme weather

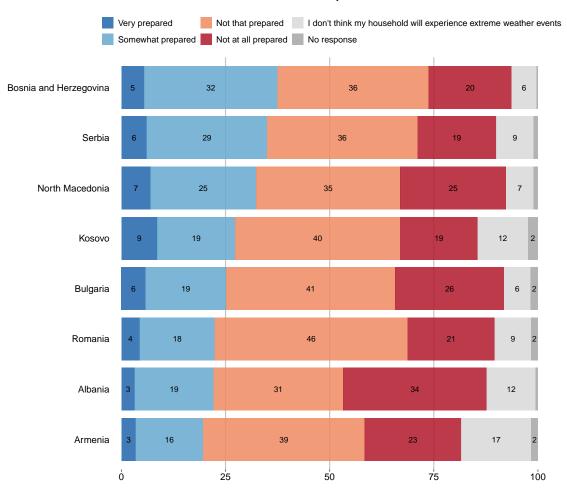
Asia & the Pacific



How prepared are you and anyone else in your household for any extreme weather events you might experience?



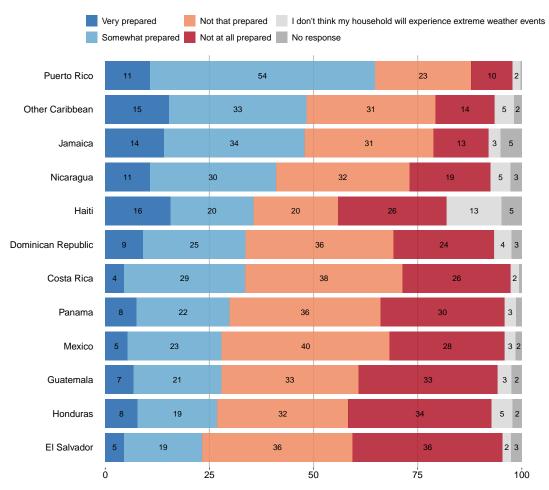
Europe



How prepared are you and anyone else in your household for any extreme weather events you might experience?



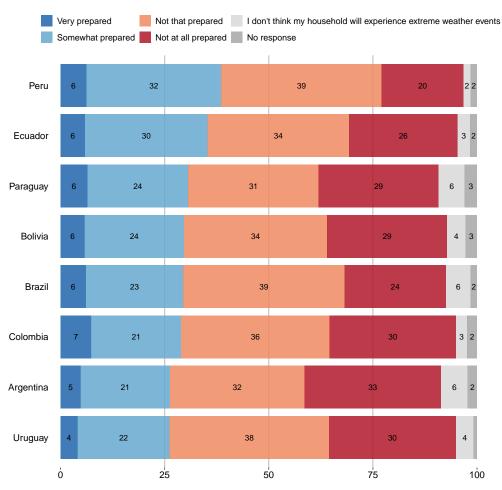
North America, Central America, & the Caribbean



How prepared are you and anyone else in your household for any extreme weather events you might experience?



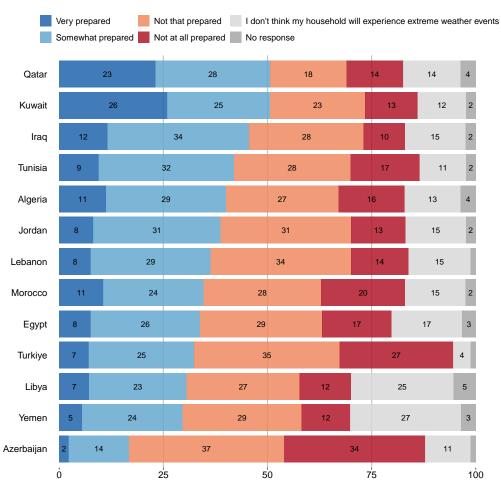
South America



How prepared are you and anyone else in your household for any extreme weather events you might experience?



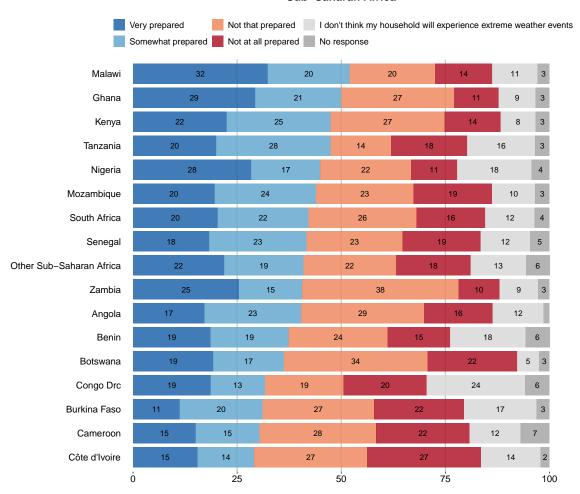
Southwest Asia & North Africa



How prepared are you and anyone else in your household for any extreme weather events you might experience?



Sub-Saharan Africa



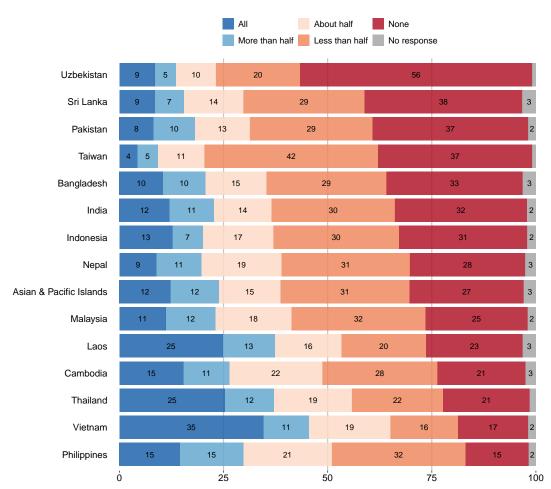
How prepared are you and anyone else in your household for any extreme weather events you might experience?



2.2 Perceived preparedness of others (descriptive norms)

Perceived preparedness of others (descriptive norms)

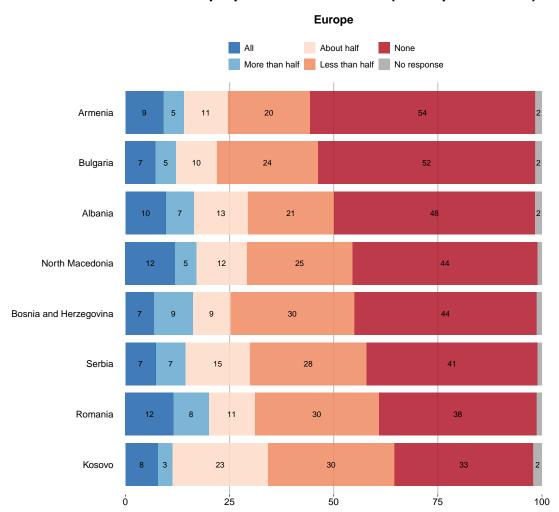
Asia & the Pacific



Think about the people you feel closest to. How many of them are currently prepared for extreme weather events like floods or droughts?



Perceived preparedness of others (descriptive norms)

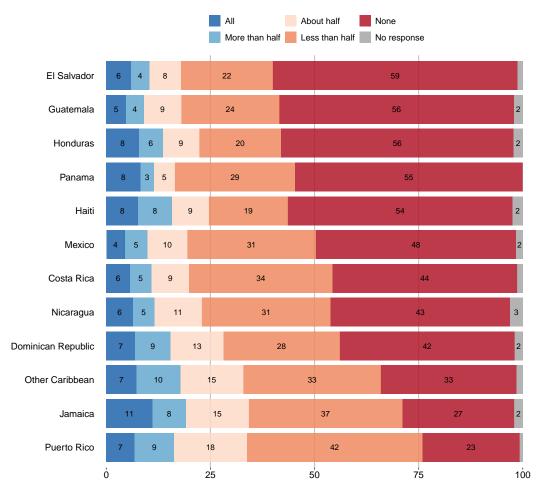


Think about the people you feel closest to. How many of them are currently prepared for extreme weather events like floods or droughts?



Perceived preparedness of others (descriptive norms)

North America, Central America, & the Caribbean

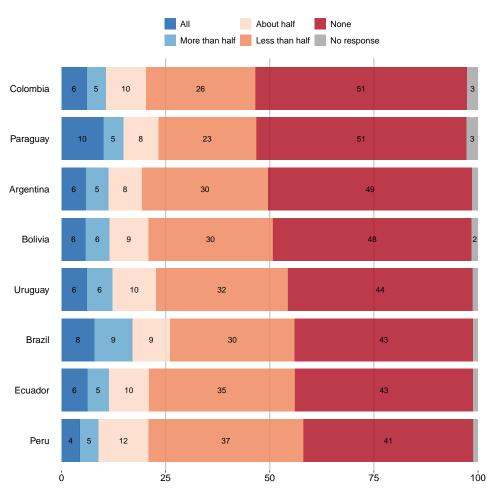


Think about the people you feel closest to. How many of them are currently prepared for extreme weather events like floods or droughts?



Perceived preparedness of others (descriptive norms)

South America

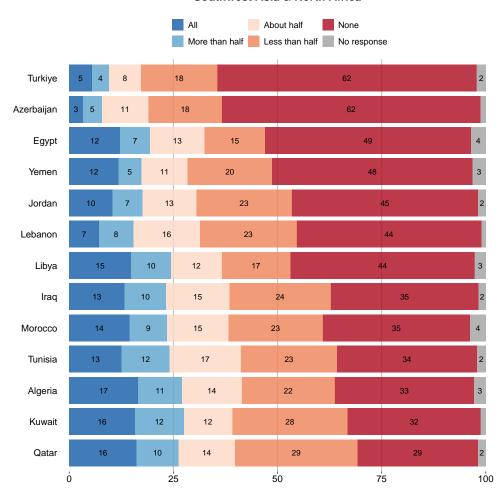


Think about the people you feel closest to. How many of them are currently prepared for extreme weather events like floods or droughts?



Perceived preparedness of others (descriptive norms)

Southwest Asia & North Africa

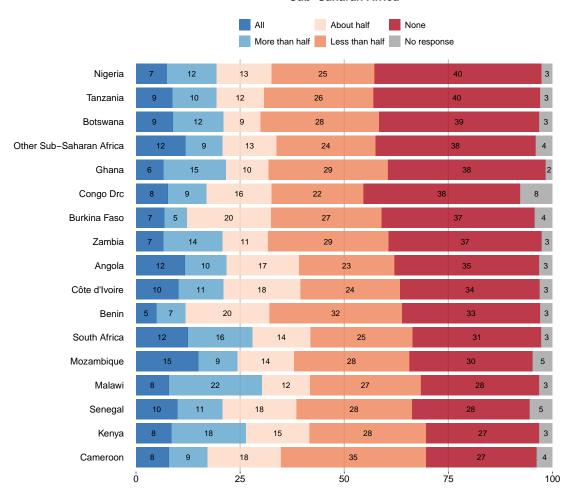


Think about the people you feel closest to. How many of them are currently prepared for extreme weather events like floods or droughts?



Perceived preparedness of others (descriptive norms)

Sub-Saharan Africa

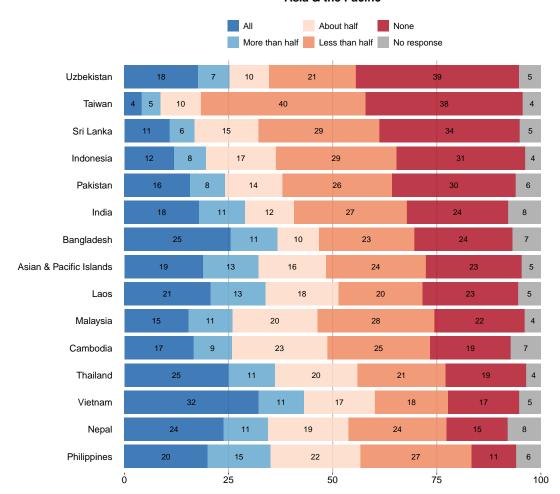


Think about the people you feel closest to. How many of them are currently prepared for extreme weather events like floods or droughts?



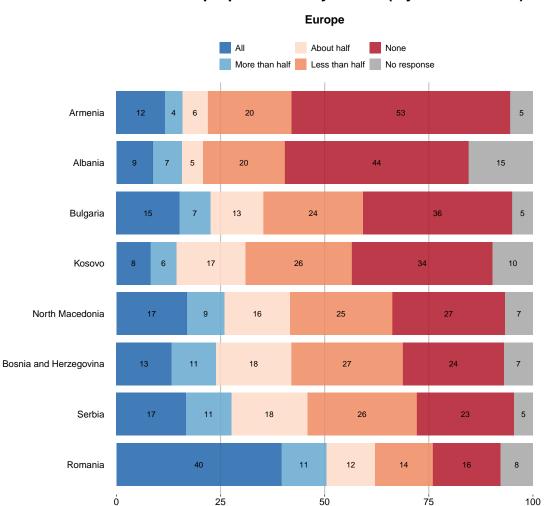
Perceived preparedness by others (injunctive norms)

Asia & the Pacific



Think about the people you feel closest to. How many of them think that you should prepare for extreme weather events like floods or droughts?

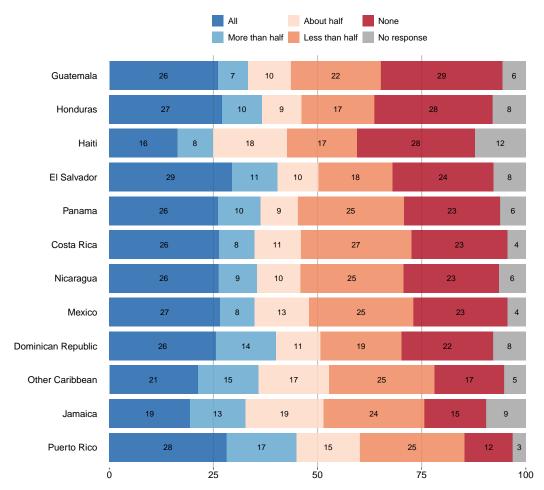




Think about the people you feel closest to. How many of them think that you should prepare for extreme weather events like floods or droughts?



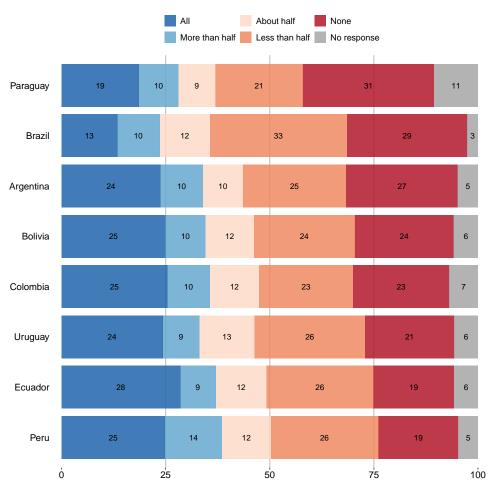
North America, Central America, & the Caribbean



Think about the people you feel closest to. How many of them think that you should prepare for extreme weather events like floods or droughts?



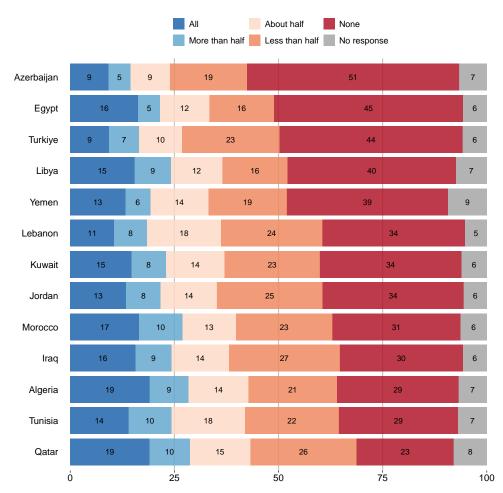
South America



Think about the people you feel closest to. How many of them think that you should prepare for extreme weather events like floods or droughts?



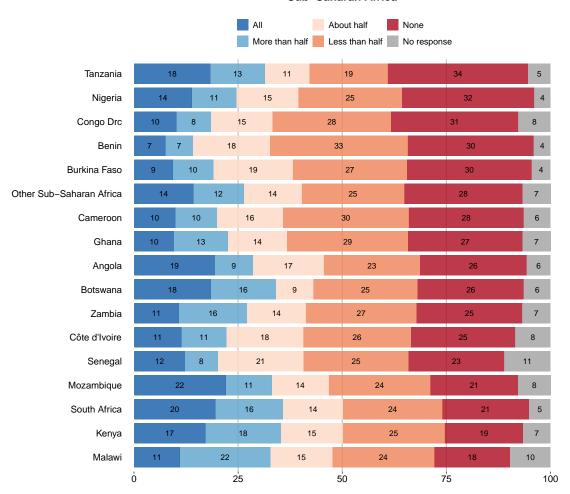
Southwest Asia & North Africa



Think about the people you feel closest to. How many of them think that you should prepare for extreme weather events like floods or droughts?



Sub-Saharan Africa

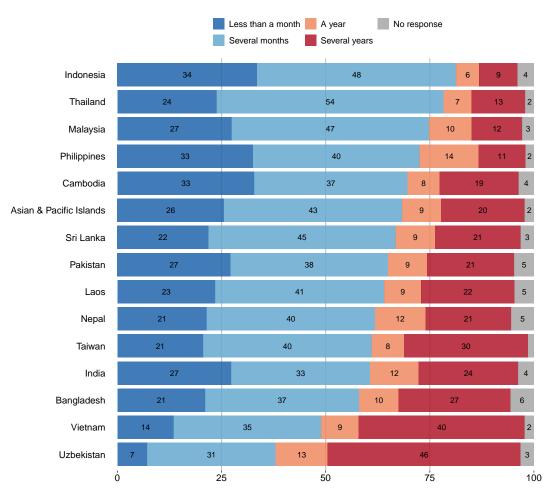


Think about the people you feel closest to. How many of them think that you should prepare for extreme weather events like floods or droughts?



Recovery from extreme weather

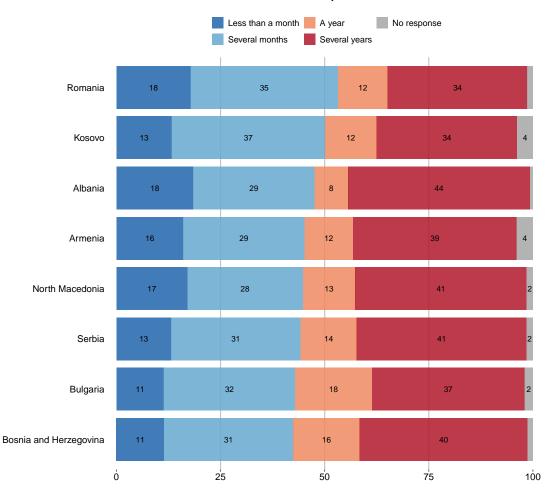
Asia & the Pacific



If an extreme weather event, like a flood or drought, happened in your local area, how long do you think it would take you or anyone else in your household to recover?



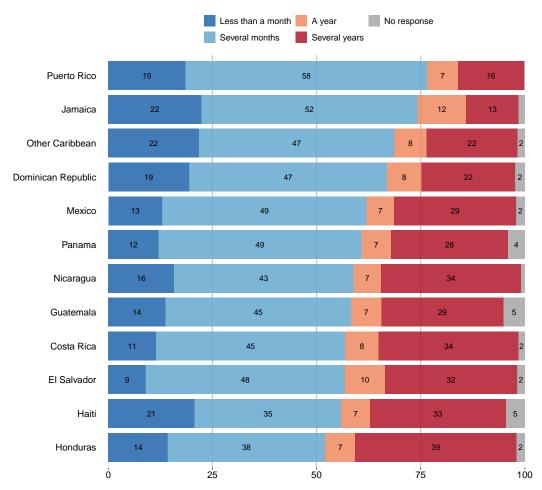
Europe



If an extreme weather event, like a flood or drought, happened in your local area, how long do you think it would take you or anyone else in your household to recover?



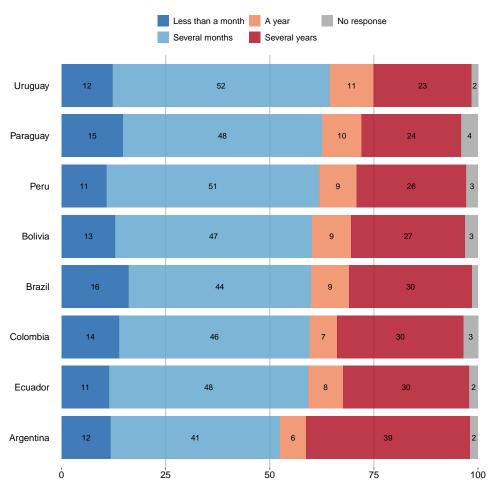
North America, Central America, & the Caribbean



If an extreme weather event, like a flood or drought, happened in your local area, how long do you think it would take you or anyone else in your household to recover?



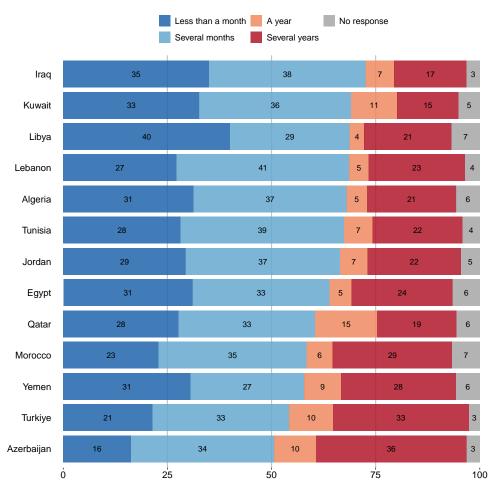
South America



If an extreme weather event, like a flood or drought, happened in your local area, how long do you think it would take you or anyone else in your household to recover?



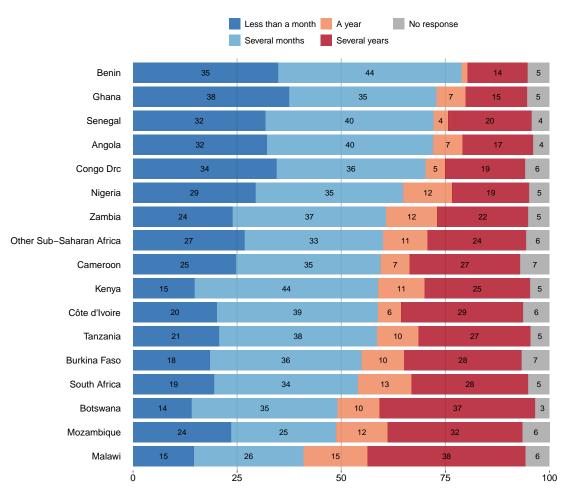
Southwest Asia & North Africa



If an extreme weather event, like a flood or drought, happened in your local area, how long do you think it would take you or anyone else in your household to recover?



Sub-Saharan Africa

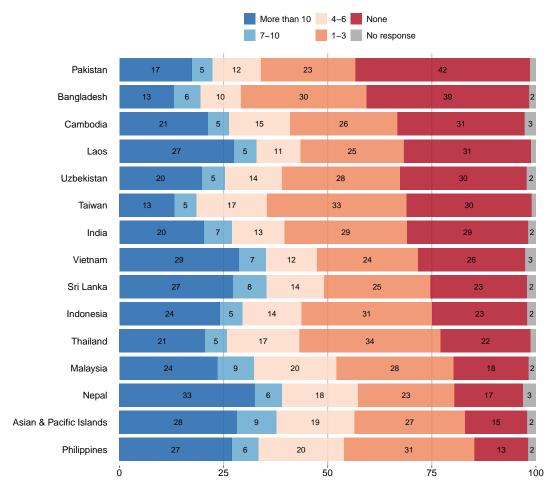


If an extreme weather event, like a flood or drought, happened in your local area, how long do you think it would take you or anyone else in your household to recover?



Support in the event of extreme weather

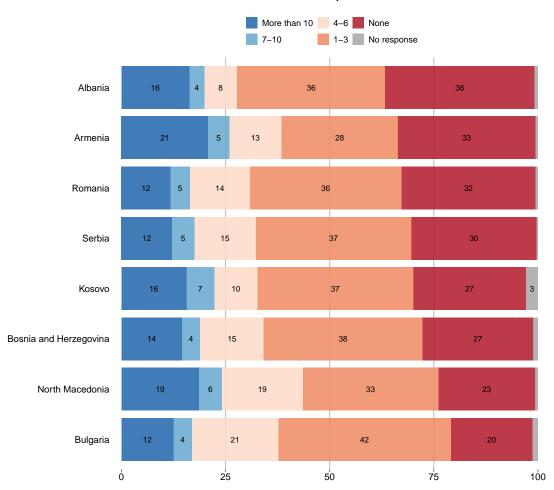
Asia & the Pacific



If you or anyone else in your household were impacted by an extreme weather event, like a flood or drought, how many relatives and friends could you count on for help?



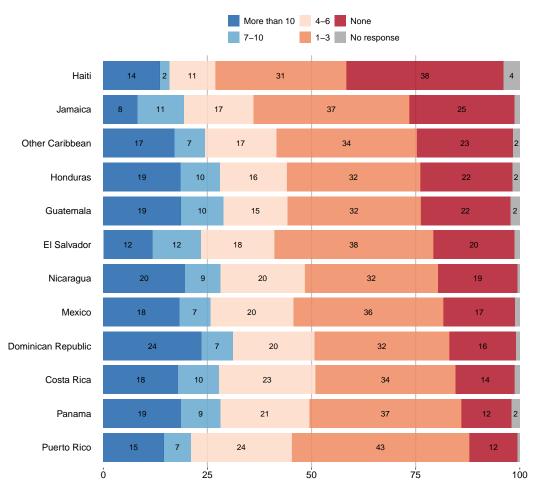
Europe



If you or anyone else in your household were impacted by an extreme weather event, like a flood or drought, how many relatives and friends could you count on for help?



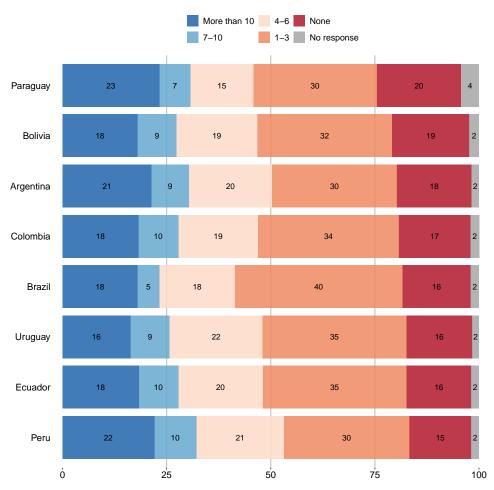
North America, Central America, & the Caribbean



If you or anyone else in your household were impacted by an extreme weather event, like a flood or drought, how many relatives and friends could you count on for help?



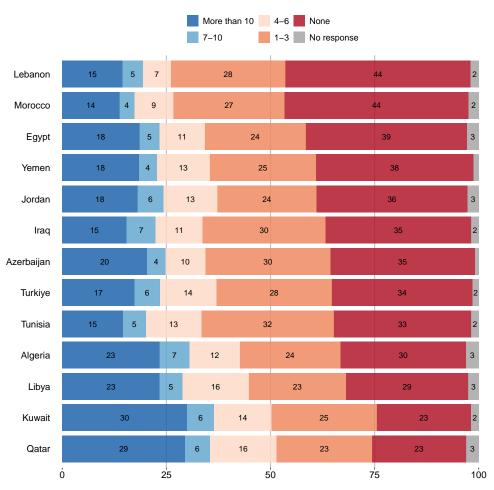
South America



If you or anyone else in your household were impacted by an extreme weather event, like a flood or drought, how many relatives and friends could you count on for help?



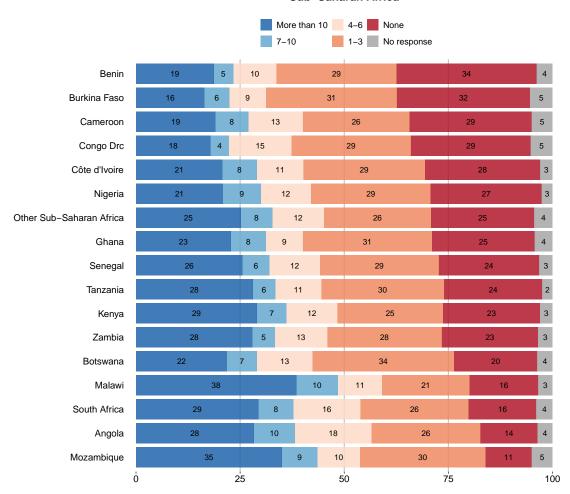
Southwest Asia & North Africa



If you or anyone else in your household were impacted by an extreme weather event, like a flood or drought, how many relatives and friends could you count on for help?



Sub-Saharan Africa



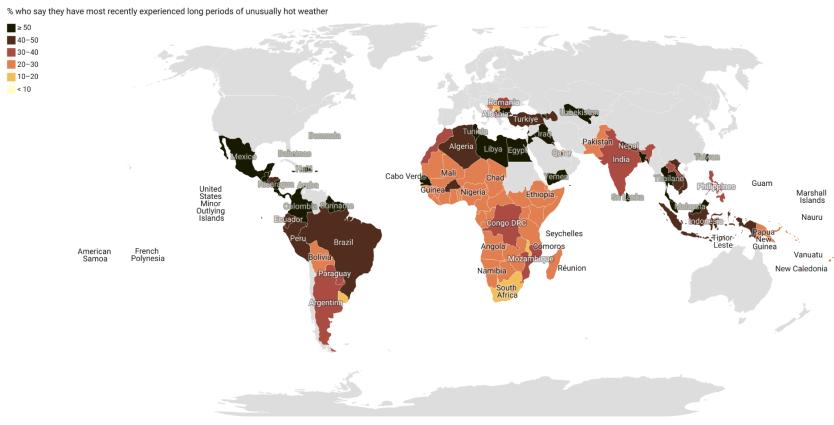
If you or anyone else in your household were impacted by an extreme weather event, like a flood or drought, how many relatives and friends could you count on for help?



Appendix III: Exposure by Hazard (Large Maps)

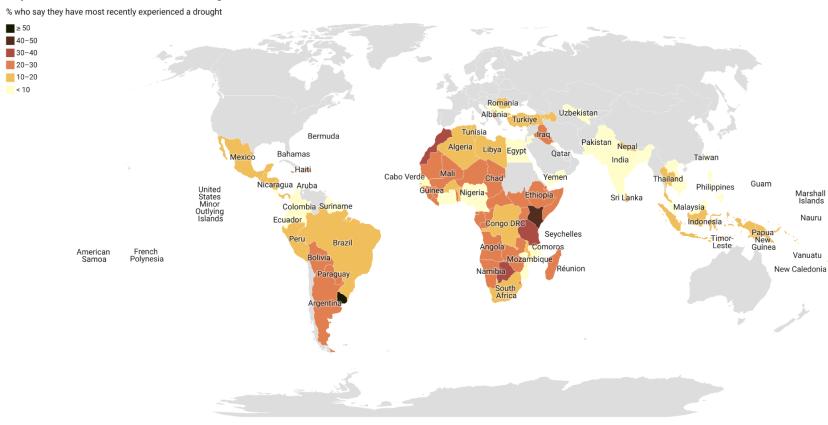
Smaller versions of these maps are presented in section 1.3.

Exposure to extreme weather: Hot Weather



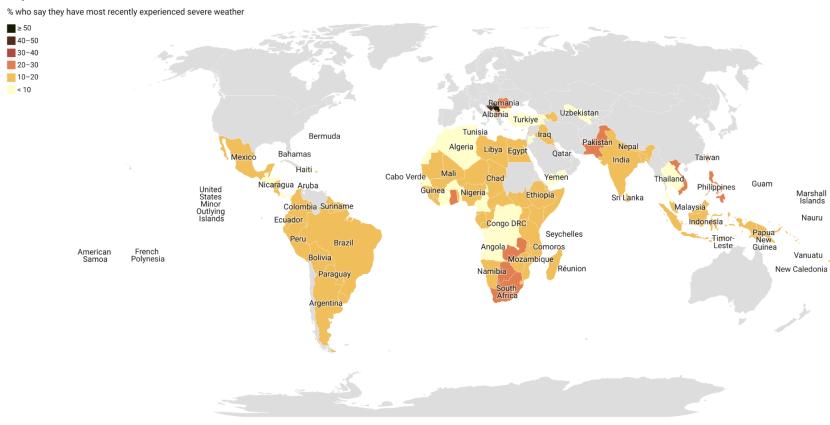


Exposure to extreme weather: Drought



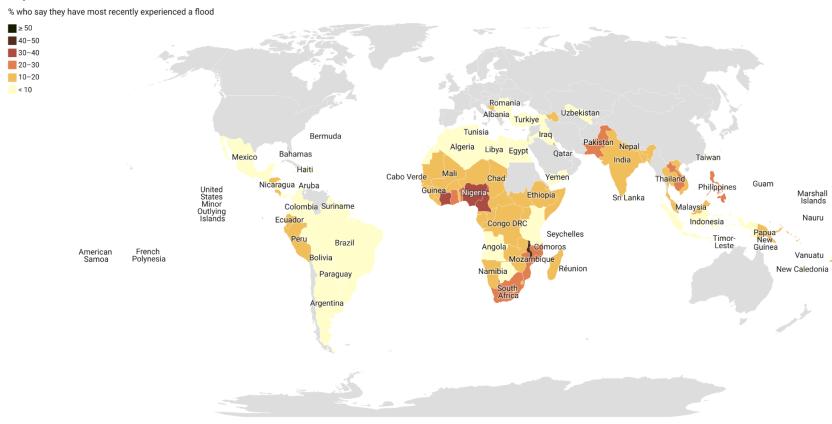


Exposure to extreme weather: Severe Weather



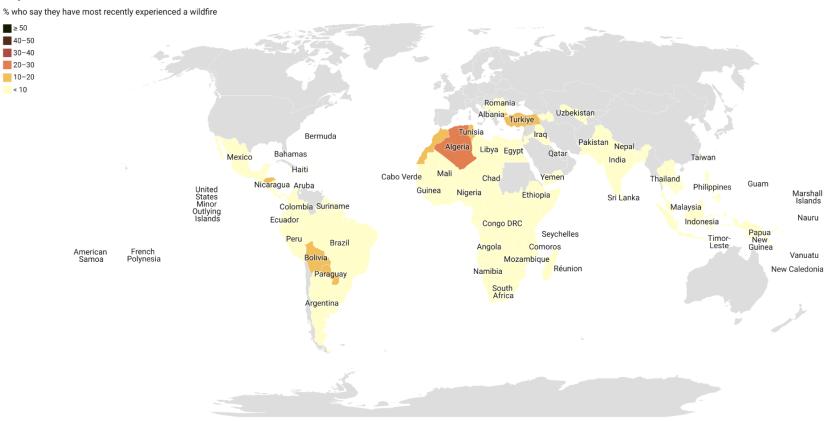


Exposure to extreme weather: Flood





Exposure to extreme weather: Wildfire





Exposure to extreme weather: Rising Sea Level



Source: Yale Program on Climate Change Communication / Data for Good at Meta / Rare's Center for Behavior & the Environment; 2023 • Created with Datawrapper

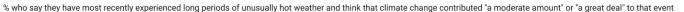
Note: Landlocked countries are excluded from the map of perceived sea-level rise exposure.

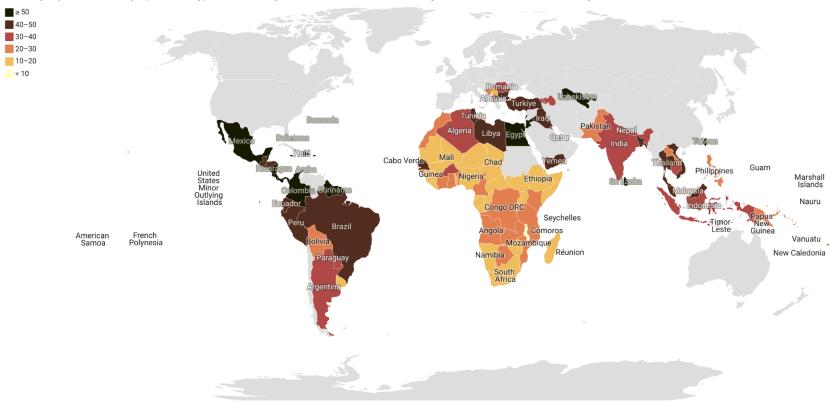


Appendix IV: Climate Change Attribution by Hazard (Large Maps)

Smaller versions of these maps are presented in section 1.4. Countries and territories included in these maps are based on two criteria: (a) 100 total respondents selected that hazard, which is (b) at least 5% of total sample size for that country or territory.

Climate change attribution: Hot Weather

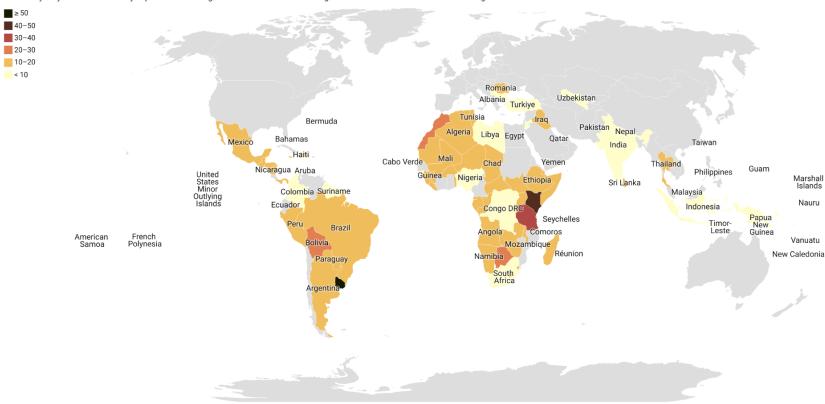






Climate change attribution: Drought

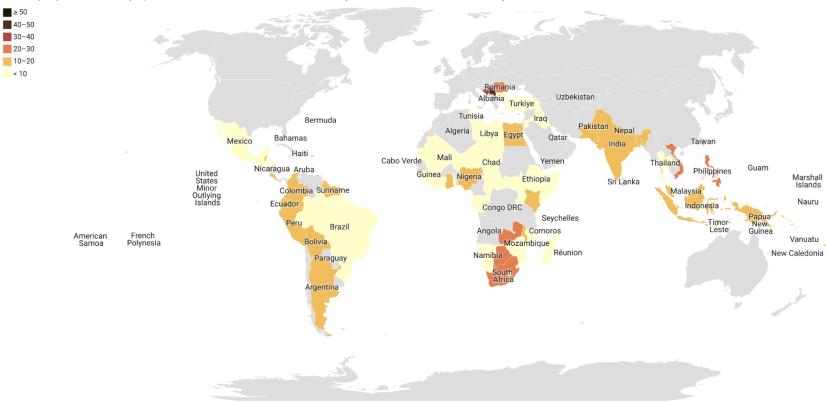






Climate change attribution: Severe Weather

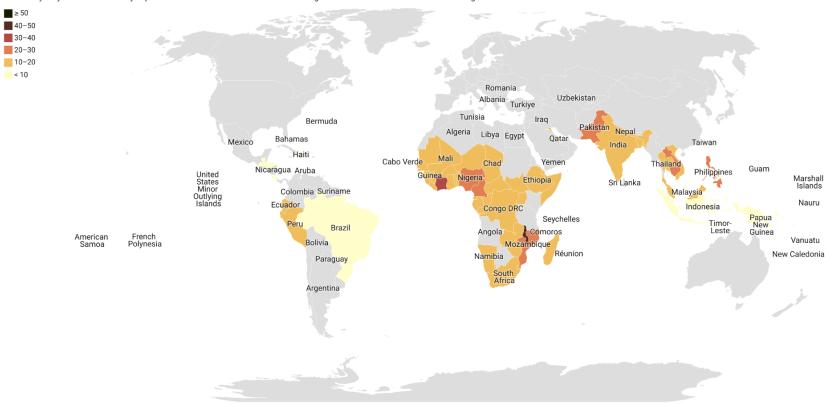






Climate change attribution: Flood

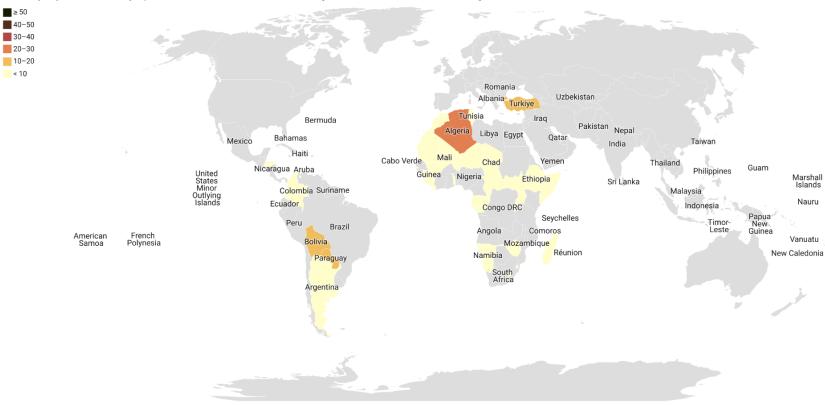






Climate change attribution: Wildfire







Climate change attribution: Rising Sea Levels

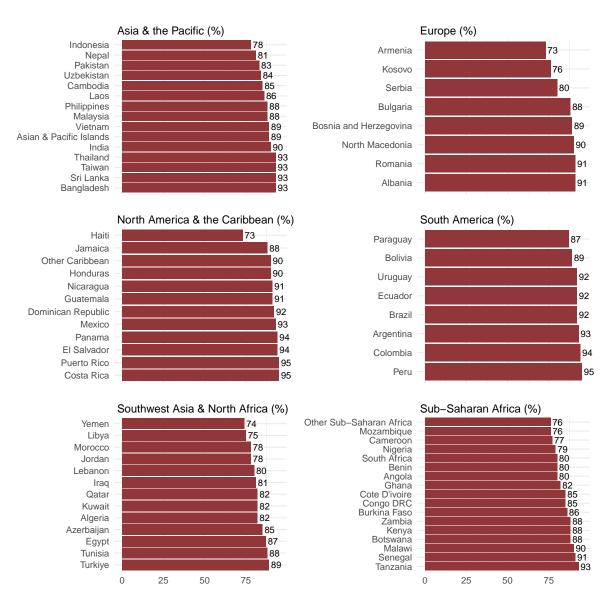






Appendix V: Climate Change Attribution by Hazard

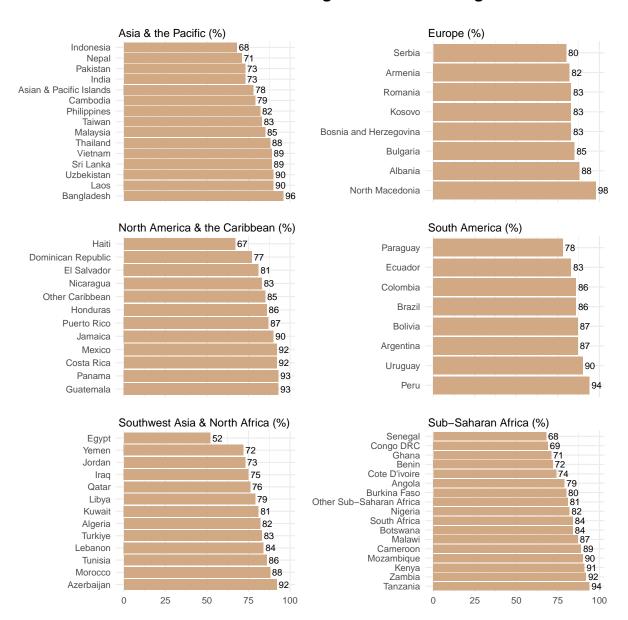
Climate change attribution: Long Periods Of Unusually Hot Weather



You indicated you have most recently experienced long periods of unusually hot weather. How much do you think climate change contributed to this event?



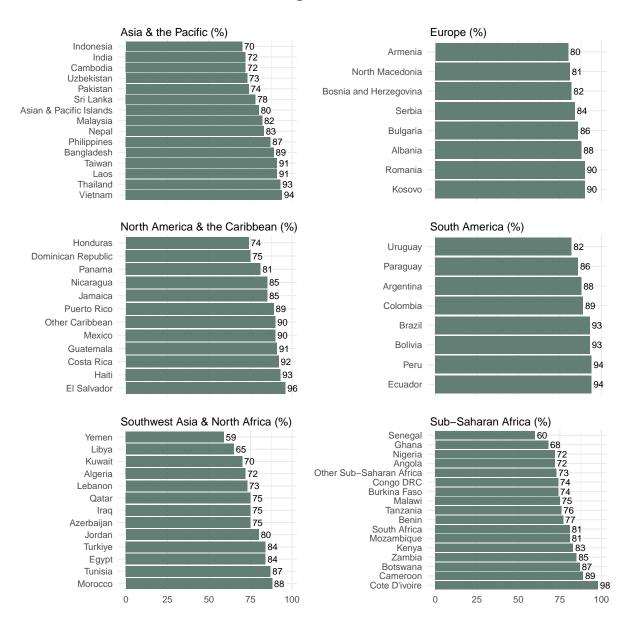
Climate change attribution: Drought



You indicated you have most recently experienced drought. How much do you think climate change contributed to this event?



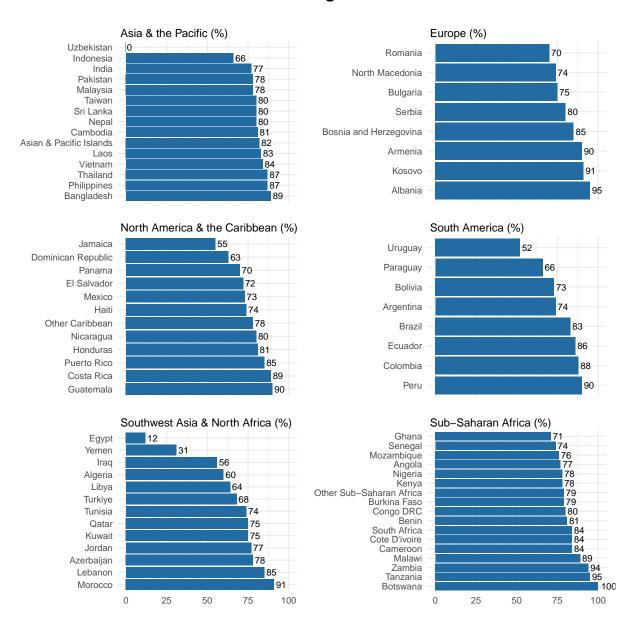
Climate change attribution: Severe Weather



You indicated you have most recently experienced severe weather. How much do you think climate change contributed to this event?



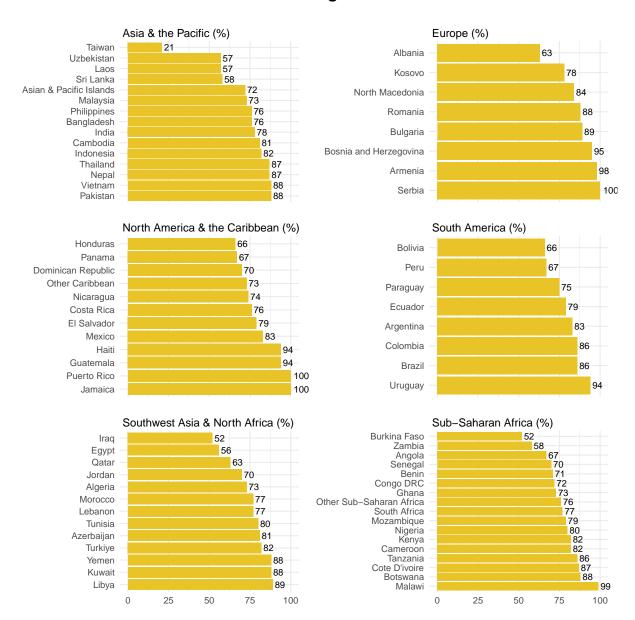
Climate change attribution: A Flood



You indicated you have most recently experienced a flood. How much do you think climate change contributed to this event?



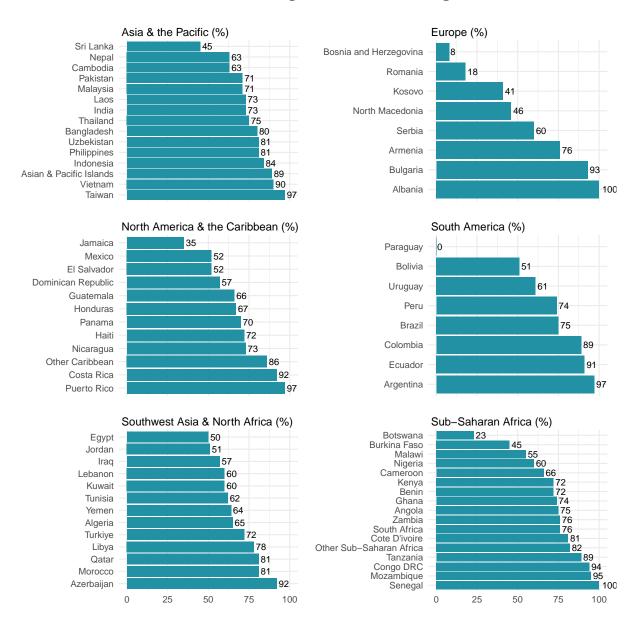
Climate change attribution: Wildfire



You indicated you have most recently experienced wildfire. How much do you think climate change contributed to this event?



Climate change attribution: Rising Sea Levels



You indicated you have most recently experienced rising sea levels. How much do you think climate change contributed to this event?







