## Climate Change Awareness Survey - National

## Dear resident,

This survey is an important part of the project called "Empowering the local community to face climate change", which is carried out by the Galilee Society, in partnership with the University of Haifa and the municipality of Shefa-'Amr.

The project is financed by the European Union and the German MISEREOR fund.

Your participation in this national survey is very important to the success of the project, as we will use the results as inputs for a guide on resilience to climate change for Arab local authorities.

For any question or interest related to the project and research, you are invited to write to Alaa Obeid alaa@gal-soc.org (Project Manager), Dr. Maya Negev mnegev@univ.haifa.ac.il (Researcher) or Alix Pahaut apahaut@staff.haifa.ac.il (PhD student).

We thank you for your cooperation and response in answering the questions of the form, and we assure you that the information you provided will remain confidential and will only be used for research purposes.

Completing the form and sending answers at the end of the questionnaire is considered consent to participate in the research study.

The survey is written in the male form but is destined for both men and women.

Thank you again.

	Question and answer	Category	Notes/ source of question (see 'database of questions' document)
1	Recently, you may have noticed that climate change has been getting some attention in the news. Climate change refers to the concept that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the	Perception	Source: Yale - 1

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	world's climate and environment is changing as a result (including outside temperature, sea level, and rainfall).  What do you think: Do you think that climate change is happening?  • Yes		
	<ul><li>No</li><li>Don't know</li></ul>		
2	Assuming climate change is happening, do you think it is	Perception	Source: Yale - 4
	<ul> <li>Caused mostly by human activities</li> <li>Caused mostly by natural changes (such as volcanoes)</li> <li>Caused both by human activities and natural changes</li> <li>Neither, because it isn't happening</li> <li>Don't know enough to say</li> </ul>		
3	What is the Greenhouse effect?	Knowledge	Source: ED quiz - 3
	<ul> <li>When heat is generated inside an airtight space</li> <li>When heat is trapped in homes to conserve energy</li> <li>When the gases in our atmosphere trap heat and block it from escaping our planet</li> <li>When energy is used to power a greenhouse (חממה)</li> <li>I don't know</li> </ul>		Modified the answer options so that the false answers b and d are suited to the Arabic word for greenhouse (that doesn't include 'green')
4	Which of the following are consequences associated with climate change?	Knowledge	Source: ED quiz - 4, but simplified a bit and added

	<ul> <li>Q4_1 The polar ice caps are melting, and global sea levels are rising         <ul> <li>yes /no/   don't know</li> </ul> </li> <li>Q4_2 Surface temperatures are setting new heat records about each year         <ul> <li>yes /no/   don't know</li> </ul> </li> <li>Q4_3 Much higher risk of earthquakes and tsunamis         <ul> <li>yes /no/   don't know</li> </ul> </li> <li>Q4_4 More extreme weather like droughts, heat waves, and hurricanes         <ul> <li>yes /no/   don't know</li> </ul> </li> <li>Q4_4 Insects that are vectors for diseases such as dengue and West Nile Virus may spread to different areas         <ul> <li>yes /no/   don't know</li> </ul> </li> </ul>	the wrong option
N e w	Compared to the rest of the world, the temperatures in the Middle East region are:  • Temperatures are increasing slower than the rest of the world  • Temperatures are increasing at a similar pace as the rest of the world  • Temperatures are decreasing compared to the rest of the world  • Temperatures are increasing faster compared to the rest of the world  • I don't know	
	In Israel, experts predict that by 2050 there will be an increase of number of days where the temperature is greater than 33°C. How many days are predicted:  - 10 - 20 additional days per year  - 20 - 50 additional days per year  - 50 -100 additional days per year  - 100 - 150 additional days per year	

	- I don't know		
5	<ul> <li>Are you worried about climate change?</li> <li>Very worried</li> <li>Somewhat worried</li> <li>Not very worried</li> <li>Not at all worried</li> </ul>	Perception/ affect	Source: Israel-6  (replaced 'air pollution' with 'climate change' and removed middle option of neither worried nor not worried)
6	When do you think climate change will start to harm people in your area?  It already harms people in my area In 15 years In 50 years In 100 years Never	Perception	Source: Yale-19 Replaced US by Galil
7	Which of the following impacts of climate change do you think may impact the country during the next 20 years (yes/no)  • Q7_1 More heat waves  • yes/no  • Q7_2 Heavier bursts of rainfall and flooding  • yes/no  • Q7_3 Drought/ water shortages  • yes/no  • Q7_4 Wildfires  • yes/no  • Q7_5 Sea level rise  • yes/no	Perception	Source: Own question semi inspired by Yale - 36 and Yale - 37
8		Lived experience	Source: Own question

	<ul> <li>8_1 Have you suffered negative health, financial or other consequences from heat/extreme heat? (On a scale of 1 to 3, 1 = no, 2 = some consequences, 3 = serious consequences)</li> <li>If said 2 or 3</li> <li>8_2 What kind of negative consequences did you suffer from heat/extreme heat? (multiple selection possible)</li> <li>Health consequences (physical/ psychological)</li> <li>Financial consequences</li> <li>Other consequences</li> </ul>		
9	9_1 Have you suffered negative health, financial or other consequences from heavy outbursts of rain/flooding? (On a scale of 1 to 3, 1 = no, 2 = some consequences, 3 = serious consequences)  If said 2 or 3  9_2 What kind of negative consequences did you suffer from heavy outbursts of rain/flooding? (multiple selection possible)  - Health consequences (physical/ psychological) - Financial consequences - Other consequences	Lived experience	Source: Own question
1 0	10_1 Have you suffered negative health, financial or other consequences from drought/water shortage? (On a scale of 1 to 3, 1 = no, 2 = some consequences, 3 = serious consequences)  If said 2 or 3  10_2 What kind of negative consequences did you suffer from drought/water shortage? (multiple selection possible)	Lived experience	Source: Own question

1	<ul> <li>Health consequences (physical/ psychological)</li> <li>Financial consequences</li> <li>Other consequences</li> <li>11_1 Have you suffered negative health, financial or other consequences from wildfires? (On a scale of 1 to 3, 1 = no, 2 = some consequences, 3 = serious consequences)</li> <li>If said 2 or 3</li> <li>11_2 What kind of negative consequences did you suffer</li> </ul>	Lived experience	Source: Own question
	from wildfires? (multiple selection possible)  - Health consequences (physical/ psychological)  - Financial consequences  - Other consequences		
1 2	If said 2 or 3 for question 8, 9, 10 or 11  In the previous questions, you indicated that you did suffer from some or serious consequences from a climate-related hazard (heat and/or heavy rains and/or drought and/or wildfires). Please describe what these consequences were.  [open text field]		
3	How often do you hear people you know (your family, friends, co-workers, etc.) talk about climate change?  Once per week or more Once per month Once per year Never	Awareness	Source: Yale 26  Modified from "How often do you discuss global warming with your family and friends?"

1 4	Where do you hear about climate change?	Awareness	Source: Arabic-
	<ul> <li>14_1 On TV (news/ documentaries/ other programs) <ul> <li>yes/no</li> </ul> </li> <li>14_2 In the radio <ul> <li>yes/no</li> </ul> </li> <li>14_3 In the newspapers/ magazines <ul> <li>yes/no</li> </ul> </li> <li>14_4 On social media <ul> <ul> <li>yes/no</li> </ul> </ul></li> <li>14_5 At school/ university/ college <ul> <li>yes/no</li> </ul> </li> <li>14_6 From conversations with friends and family</li> <li>yes/no</li> </ul> <li>14_7 From the municipality/government websites <ul> <li>yes/no</li> </ul> </li> <li>14_8 From NGOs <ul> <li>yes/no</li> </ul> </li> <li>14_9 Never</li>		speaking template + Yale-28 also has a bit similar but different "How often do you hear about global warming in the media (TV, movies, radio, newspapers/n ews websites, magazines, etc.)?"
1 5	Public health experts argue that women are more vulnerable to climate change than men. What are the reasons in your opinion?		Source: Own question to try to capture something gender-related
	<ul> <li>15_1 Women's bodies are more sensitive to heat         <ul> <li>yes/no/I don't know</li> </ul> </li> <li>Women use cars less for transport and are therefore more exposed to heat while on the move         <ul> <li>yes/no/I don't know</li> </ul> </li> <li>15_2 Women are more exposed to the outside environment         <ul> <li>yes/no/I don't know</li> </ul> </li> <li>15_3 Women are poorer and therefore less able to afford air conditioning         <ul> <li>yes/no/I don't know</li> </ul> </li> <li>15_4 Women do more home physical activities         <ul> <li>yes/no/I don't know</li> </ul> </li> </ul>		Useful reference: https://www.st language.com/%d7%90%d7%a7%d7%9e%d7%99%d7%9e%d7%92%d7%99%d7%99%d7%a8%d7%99-%d7%a0%d7%a9%d7%99%d7%

			97%d7%96%d7 %99%d7%aa/
1 6	How worried are you about the following issues (on a scale of 1 to 4, with 1 = not worried, 2 = not really worried, 3 = somewhat worried, 4 = very worried)  • 16_1 Infectious Diseases  • 1-4  • 16_2 Economic situation (employment and poverty)  • 1-4  • 16_3 Crime and violence  • 1-4  • 16_4 Regional conflict/ war  • 1-4  • 16_5 Climate change  • 1-4  • 16_6 Extreme heat waves  • 1-4  • 16_7 Floods  • 1-4  • 16_8 Wildfires  • 1-4  • 16_9 Drought  • 1-4	Perception	Source: Maya and Shlomit's Haifa study Q2 - modified selection of answers
7	How much do you trust the following sources regarding information about climate change (each on scale of 1-3 - 1 is low trust, 2 is medium trust, 3 is high trust)  • 17_1 The news  • 1-3  • 17_2 Social media  • 1-3  • 17_3 The municipality  • 1-3  • 17_4 Governmental agencies  • 1-3  • 17_5 Religious authority  • 1-3  • 17_6 Universities  • 1-3	Perception	Own question inspired from Arabic-speaking template

1 8	<ul> <li>17_7 Family and friends <ul> <li>1-3</li> <li>17_8 Scientists</li> <li>1-3</li> </ul> </li> <li>17_9 Environmental NGOs <ul> <li>1-3</li> </ul> </li> <li>17_10 My own experience <ul> <li>1-3</li> </ul> </li> <li>Are you aware of local programs and initiatives to tackle climate and its impacts?</li> </ul> <li>Yes/ No</li>	Knowledge	Own question
1 9	To what extent do you think the below actors are responsible to take action regarding climate change and its impacts? (on a scale of 1 to 3, 1 - low responsibility, 2 - medium responsibility, 3 - high responsibility)  • 19_1 Municipality  • 1-3  • 19_2 Governmental agencies  • 1-3  • 19_3 International organizations  • 1-3  • 19_4 Environmental NGOs  • 1-3  • 19_5 Individuals  • 1-3  • 19_8 Companies and industry  • 1-3	Perception	Source: Inspired by Israel 2020 'Who has the responsibility to act to reduce air pollution?' section Israel-14 to Israel-23
9	Would you be willing to take the following actions to enhance your and your community's readiness to climate change?  • 19_1 Watch a short film or read an article about climate change and its local impacts  • yes/no  • 19_2 Share the short film or article with my friends and family  • yes/no		Souce: Inspired by Yale-31 and Yale-32 + Israel-25 to Israel-32 ('Willingness to be personally involved' section) - however modified to

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	<ul> <li>19_3 Participate in an in-person information session and discussion about climate change and its local impacts         <ul> <li>yes/no</li> </ul> </li> <li>19_4 Sign a petition/ participate in campaigns for my local authority to take action related to climate change         <ul> <li>yes/no</li> </ul> </li> <li>19_5 During election times, inform myself on whether political candidates address climate change and its impacts in their proposals         <ul> <li>yes/no</li> </ul> </li> <li>19_6 Be a volunteer in a 'climate resilience team' that helps vulnerable people during emergencies such as electricity breaks, floods, heat waves or wild fires         <ul> <li>yes/no</li> </ul> </li> <li>19_7 Plant trees to provide cooling shade for the yard and/or the street         <ul> <li>yes/no</li> </ul> </li> <li>19_8 To transition to a renewable energy source in my home/workplace, such as solar energy         <ul> <li>yes/no</li> </ul> </li> </ul>		focus more on adaptation rather than mitigation
2	How confident are you that you have the capacities to be a volunteer in a 'climate resilience team' that helps vulnerable people during emergencies such as electricity breaks, floods, heat waves or wild fires?	Self-efficacy	
	1- Very confident		
	2 - Confident		
	3 - Not very confident		
	4 - Not confident at all		

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2	How much do you agree with this statement:	Injunctive norms	
	"My community expects me to be a volunteer in a 'climate resilience team' that helps vulnerable people during emergencies such as electricity breaks, floods, heat waves or wild fires"		
	1 - Strongly agree		
	2- Agree		
	3 - Disagree		
	4 - Strongly disagree		
2 2	How likely is it that people living in your community will themselves volunteer to be in a 'climate resilience team' that helps vulnerable people during emergencies such as electricity breaks, floods, heat waves or wild fires?	Descriptive norms	
	1 - Very likely		
	2- Likely		
	3 - Not very likely		
	4 - Very unlikely		
2 3	How much do you agree with this statement:  "A volunteer 'climate resilience team' would be an effective way to help vulnerable people during climate- related emergencies"		
	1 - Strongly agree		

	2- Agree	
	3 - Disagree	
	4 - Strongly disagree	
2	Do you have a yard/ garden/private outside space?	
4	Yes	
	No	
	24_1 IF ANSWERED YES TO do you have a yard/garden	
	What is the situation of your yard or garden?	
	<ul> <li>The ground is completely or almost completely covered in impermeable materials (asphalt, concrete, tiles)</li> <li>The ground is completely or almost completely open soil/ open soil with plants/ or covered with materials that allow rain absorption (e.g. gravel)</li> <li>More than 60% of the ground is covered with impermeable materials (asphalt, concrete, tiles)</li> <li>More than 60% of the ground is open soil, plants or covered with materials that allow rain absorption</li> </ul>	
	24_2 IF ANSWERED a or c above  Would you be willing to change the cover of your yard/garden so that more of it can absorb rainwater (using soil covered by plants or covered by permeable materials like gravel)? This could contribute to rainwater management and reduce risk of floods.	

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	2- Likely	
	3 - Not very likely	
	4 - Very unlikely	
	24_6 How much do you agree with this statement: "Having more yards/gardens with permeable ground like soil covered with plants or with gravel can effectively contribute to reducing risk of floods in my village/city"	
	1 - Strongly agree	
	2- Agree	
	3 - Disagree	
	4 - Strongly disagree	
2 5	IF ANSWERED YES to do you have a yard/garden	
	Would you be willing to plant a tree (or an additional tree) in your yard/garden, positioned in a way for the tree to provide shade and cooling also to the public street (e.g. positioned close to the fence)?	
	<ul> <li>Yes</li> <li>No</li> <li>There are already tree(s) close to the fence and there is no space for any more</li> </ul>	
	25_1 How confident are you that you have the capacities to plant an additional tree in your yard/garden, positioned to also provide shade and cooling to the public street?	
	1- Very confident	

2 - Confident	
3 - Not very confident	
4 - Not confident at all	
25_2 How much do you agree with this statement:	
"My community will approve if I plant an additional tree in my yard/garden, positioned to also provide shade and cooling to the public street?	
1 - Strongly agree	
2- Agree	
3 - Disagree	
4 - Strongly disagree	
25_3 How likely is it that people living in your community will plant tree(s) in their own yard/gardens, positioned to also provide shade and cooling to the public street?	
1 - Very likely	
2- Likely	
3 - Not very likely	
4 - Very unlikely	
25_4 How much do you agree with this statement:	

	"Having more trees in private yards/gardens positioned close to the public street is an effective way to increase cooling for the neighborhood"  1 - Strongly agree	
	2- Agree	
	3 - Disagree	
	4 - Strongly disagree	
2 6	Who owns the house where you are currently living?	
	<ul> <li>I own the house where I live</li> <li>The house where I live belongs to a family member</li> <li>I rent the house where I live (not from a family member)</li> </ul>	
	26_1 IF ANSWERED a or b above	
	Are the gutters מרזבים of your house/building currently connected to the sewage system?	
	<ul><li>Yes</li><li>No</li><li>I don't know</li></ul>	
	26_2 IF ANSWERED YES	
	Would you be willing to disconnect your gutters from the sewage system, and instead let water spill out into the open (for example into your yard/garden or into the street)? This could help prevent overflow from the sewage system.	
	- Yes	

- No	
26_3 How confident are you in your ability to disconnect your gutters from the sewage system (and instead let water spill out into the open, for example into your yard/garden or into the street)?	
1- Very confident	
2 - Confident	
3 - Not very confident	
4 - Not confident at all	
26_4 How much do you agree with this statement:	
"My community will approve if I disconnect my gutters from the sewage system (and instead let water spill out into the open, for example in my yard/garden or into the street)?"	
1 - Strongly agree	
2- Agree	
3 - Disagree	
4 - Strongly disagree	
26_5 How likely is it that people living in your community are willing to disconnect their gutters from the sewage system (for those who are currently connected)?	
1 - Very likely	

	2- Likely		
	3 - Not very likely		
	4 - Very unlikely		
	26_6 How much do you agree with this statement: "Disconnecting gutters from the sewage system is an effective way to reduce the risk of sewage system overflow"		
	1 – Strongly agree		
	2- Agree		
	3 – Disagree		
	4 – Strongly disagree		
2 7	To what extent do you agree with the following statements  1 – don't agree, 2 – somewhat agree, 3 – strongly agree  • 27_1 In my village/city there is mutual help and concern for the other  • 1-3  • 27_2 In my village/city we are organized for an emergency  • 1-3  • 27_3 I have great confidence in the decision makers in my village/city who will come to my aid in case of crisis  • 1-3  • 27_4 The residents of my village/city know exactly what their role is in emergencies  • 1-3  • 27_5 I can count on people in the village/city to	Perception	Adapted from Haifa questionnaire, Q7
	come to my aid in a time of crisis   1-3		

2 8	Do you feel that your community and environment are ready to handle the impacts of climate change? (scale of 1 - 4 very ready, not ready at all)	Perception	Own question
2 9	Do you have any comments related to this survey?		Own question - open question
30	What is your age  • Less than 15  • 15 - 20  • 20 - 30  • 30 - 40  • 40 - 50  • 50 - 60  • 60 - 70  • 70+	Demographic	
31	<ul><li>What is your gender</li><li>Male</li><li>Female</li></ul>	Demographic	
32	<ul> <li>What is your occupation</li> <li>1 Academic Professions</li> <li>2 Technicians</li> <li>3 Service and sales workers</li> <li>4 Agricultural workers</li> <li>5 Craft and related trade workers</li> <li>6 Student</li> <li>7 Unemployed</li> </ul>	Demographic	Occupation categories are the same ones as the Galilee Society 5th Palestinians survey, plus added 'student'
33	What is your level of education  Less than secondary  Secondary completion certificate  College certificate/diploma  Bachelor's degree and above	Demographic	

34	<ul> <li>In which region do you live?</li> <li>North region</li> <li>Haifa region</li> <li>Center region</li> <li>South region</li> </ul>	Demographic	
35	Religious background (please note: we ask this question in order to ensure good representation of different groups)  • Muslim  • Druze  • Christian  • Other	Demographic	
36	To what extent are you committed to practicing religious rituals?  • Not committed at all • Practice some rituals only • Practice rituals sometimes • Practice rituals always	Demographic	Galilee Society questionnaire
37	Would you like to be informed about the results of this survey or receive updates about our project? Yes/No		

After the "submit" button is pressed, if answered yes respondent is automatically redirected to a 2nd survey for the below (the respondent will not notice that it's a different survey.. this just technically allows us to separate the answers to ensure anonymity)