

GlobalPlasticExpertSurvey V5 05-14

Survey Flow

Standard: Informed Consent (1 Question)
Standard: Country City (2 Questions)
Standard: Plastic Pollution (3 Questions)
Standard: Waste Management (11 Questions)
Standard: Waste plastic as energy fuel (8 Questions)
Standard: Other Energy Sources (1 Question)
Standard: Vulnerability and impact (2 Questions)
Standard: Policy consideration (4 Questions)
Standard: Demographic information (8 Questions)

Page Break

Start of Block: Informed Consent



Q1.1

Thank you for taking part in this survey! 😊

We are interested in understanding the nexus between energy poverty, plastic pollution and cooking fuel.

You are being asked to complete this survey as your expertise and/or experiences are relevant to these areas. The survey will take about 15 minutes to complete.

Before you take part, please read why this research is being done and what it will involve in the [Participant Information Sheet](#). You must be over 18 years old to take part.

Click the box below to indicate that you're older than 18 and your informed consent to start the survey.

- I declare that I have read the Participant Information Sheet and consent to taking part in this survey (1)
- I do not want to participate in this survey (2)

Skip To: End of Survey If Thank you for taking part in this survey! 😊 We are interested in understanding the nexus betwee... = I do not want to participate in this survey

End of Block: Informed Consent

Start of Block: Country City



Q2.1 What is the name of the country you are currently residing? (Select from the dropdown list)

▼ Afghanistan (1) ... Zimbabwe (193)

Q2.2 What city do you currently reside in?

End of Block: Country City

Start of Block: Plastic Pollution



Q3.1 We are trying to understand the extent of plastic pollution and current waste management practices in your city.

Please rate the extent to which you agree with the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Plastic is an essential material for people's livelihoods (Q3.1_1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic pollution is a serious issue in my city (Q3.1_3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic is used for cooking fuel as a replacement for other fuels (Q3.1_6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic pollution is more severe in low-income areas like slum settlements (Q3.1_7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weak regulations on chemicals like pesticides have increased the toxicity of plastic waste (Q3.1_11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mismanaged plastic blocks drainage and causes urban flooding (Q3.1_12)

Plastic waste in low-income settlements like slum areas is more toxic due to the inflow of toxic waste from rivers and factories (Q3.1_13)

Burning plastic exacerbates air pollution in my city (Q3.1_14)

Page Break



Q3.2 We are trying to understand how plastic is becoming a part of life for people om your city. Do you think people are gradually becoming more comfortable using plastic (For example, do people eat food in plastic containers, use it in daily life etc.)

- None at all (1)
- A little (2)
- A moderate amount (3)
- A lot (4)
- A great deal (5)

Page Break

X→

Q3.3 We are trying to understand how plastic is entering the houses in your city.

Please rate the extent to which you agree with the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Waste plastic is used for building house walls in slum and informal settlements (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is common practice to burn waste plastic (like polythene bags) in the fire of traditional stoves. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic is used for storing things like food, spices or left over food (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People are aware that burning plastic can be harmful (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Households burn plastic as a way of managing plastic waste (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic is burnt to stick things together (for example. to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

seal leakages
in water pipes
or pots and
jerrycans)
(11)

End of Block: Plastic Pollution

Start of Block: Waste Management



Q4.1 What types of waste management services does the city have?

- Municipal / government (1)
- Private neighborhood services (2)
- Both (3)
- None (4)
- Do not know (5)

Display This Question:

If What types of waste management services does the city have? = Municipal / government



Q4.2 What areas are covered?

- All areas (1)
 - Only formal settlement (2)
 - All formal settlement and some informal settlement (3)
 - A subset of formal and informal settlement (4)
-

Display This Question:

If What types of waste management services does the city have? = Municipal / government

X→

Q4.3 What do the waste management service cover?

- All waste-disposal (1)
- Organic waste - composting (2)
- Recycling (3)
- A subset of formal and informal settlement (4)

Display This Question:

If What types of waste management services does the city have? = Municipal / government

X→

Q4.4 Is the waste collection service adequate?

- Extremely inadequate (1)
- Somewhat inadequate (2)
- Neither adequate nor inadequate (3)
- Somewhat adequate (4)
- Extremely adequate (5)

Display This Question:

If What types of waste management services does the city have? = Municipal / government

X→

Q4.5 How is the collected waste managed?

- Dumped in river bank (1)
- Dumped in open space near the city (2)
- Landfilled (3)
- incinerated (4)
- Scattered (5)

Display This Question:

If What types of waste management services does the city have? = Municipal / government



Q4.6 Does your city promote waste segregation?

- Yes--provide separate bin for recyclable (1)
- Yes through awareness (2)
- Yes through other measures (3)
- Yes by collecting organic and recyclable separately (4)
- No (5)
- Do not know (6)

Display This Question:

If What types of waste management services does the city have? = Municipal / government



Q4.7 Do households pay a fee for solid waste collection?

- No (1)
- Yes (2)

Display This Question:

If Do households pay a fee for solid waste collection? = Yes

X→

Q4.8 How costly is the fee for solid waste management?

- Not at all expensive (1)
- Slightly expensive (2)
- Moderately expensive (3)
- Very expensive (4)
- Extremely expensive (5)

Page Break

Display This Question:

If Do households pay a fee for solid waste collection? = Yes



Q4.9 Is the solid waste management fee affordable for low-income household?

- No (1)
 - Yes (2)
 - Do not know (3)
-



Q4.10 Do recycling collectors buy used/waste plastic from households?

- Yes--they are very common and visit frequently in our city (1)
 - Yes--they visit the neighbourhood sometimes (2)
 - Yes--I rarely see them in my neighborhood (3)
 - No (4)
 - Do not know (5)
-



Q4.11 How extensively do households collect plastic to sell to recycling collectors?
Please rate your response based on the proportion of households participating in this activity

- None (1)
- A few (2)
- Some (3)
- Many (4)
- Most (5)

End of Block: Waste Management

Start of Block: Waste plastic as energy fuel



Q5.1 Are you aware of households burning waste plastic as fuel to meet their household energy needs (e.g. fire starters and for cooking and heating)?

- No (1)
- Unsure / maybe (2)
- Yes (3)

Display This Question:

If Are you aware of households burning waste plastic as fuel to meet their household energy needs (e... = Yes



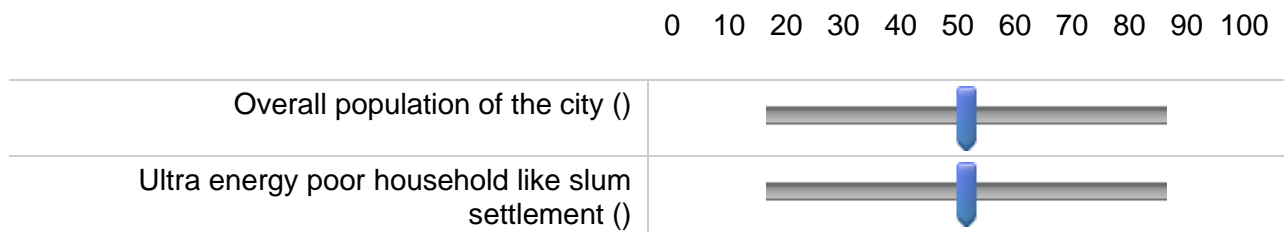
Q5.2 Please indicate whether you are aware of the following scenarios occurring

	No (1)	Unsure (2)	Yes, I have done this. (3)	Yes I have seen (4)	Yes, I have heard (5)
Plastic waste being burnt and used as a fuel for cooking / preparing food (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste being burnt and used as a fuel for heating (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste being burnt and used as a fuel for cattle feed preparation (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste is burnt and used by mixing with other fuels like firewood. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste being burnt and used to produce smoke that will deter pests e.g. mosquitos (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste being burnt and used as a fire starter (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If Are you aware of households burning waste plastic as fuel to meet their household energy needs (e... = Yes

Q5.3 What percentage of household energy (cooking and heating) could be fulfilled by burning plastic waste? Note, Zero '0' indicates all fuel is fulfilled from other sources (other than waste plastic) and 100 indicates all household cooking energy is fulfilled by burning waste plastic.



Display This Question:

If Are you aware of households burning waste plastic as fuel to meet their household energy needs (e... = Yes



Q5.4 Out of 100 households that burn plastic, how many engage in this practice? (The total must equal 100):

Burn plastic for cooking only : _____ (1)

Burn plastic waste for heating only : _____ (2)

Burn plastic for heating and cooking both : _____ (3)

Total : _____

Page Break _____

Display This Question:

If Are you aware of households burning waste plastic as fuel to meet their household energy needs (e... = Yes



Q5.5 From your perspective, which kinds of plastic materials do you know are burned for household energy purposes? Please drag and drop them in a list from the most frequently used (1) to the least frequently used (5).

_____ Polyethylene Terephthalate (PET or PETE) e.g. beverage bottles (water bottles), food bottles/jars (salad dressing, peanut butter, honey) and polyester clothing or rope. (1)

_____ High-Density Polyethylene (HDPE) e.g. milk cartons, detergent bottles, cereal box liners, toys, buckets, park benches and rigid pipes (2)

_____ Polyvinyl Chloride (PVC or Vinyl) e.g. plumbing pipes, credit cards, human and pet toys, rain gutters, medical tubing and oxygen masks (3)

_____ Low-Density Polyethylene (LDPE) e.g. plastic/cling wrap, sandwich and bread bags, bubble wrap, garbage bags, grocery bags and beverage cups (4)

_____ Polypropylene (PP) e.g. straws, bottle caps, prescription bottles, hot food containers, packaging tape, disposable diapers and DVD/CD boxes (5)

_____ Polystyrene (PS or Styrofoam) e.g. cups, takeout food containers, shipping and product packaging, egg cartons, cutlery and building insulation (6)

_____ Other large waste plastic items often made from composite materials e.g. tyres, white goods, fishing equipment, WEEE (7)

Page Break

Display This Question:

If Are you aware of households burning waste plastic as fuel to meet their household energy needs (e... = Yes



Q5.6 What type of plastic waste source are you aware of being burnt to meet household energy needs? (Choose all that applies)

- Food wrappers or bag (1)
- bag, bottle or wrapper used for packing chemicals such as fertilizer, pesticides, cleaning liquids etc (2)
- Non-food plastic items used in household like clothes and bucket (3)
- Construction and furniture materials like pipes and broken plastic chairs (4)
- Other large waste plastic items often made from composite materials e.g. tyres, white goods, fishing equipment, WEEE (5)
- Other 1 (6) _____

Display This Question:

If Are you aware of households burning waste plastic as fuel to meet their household energy needs (e... = Yes



Q5.7 What type of stove is most commonly used by households to burn plastic?

- Three stone traditional stove (1)
- Mud (traditional stove) (2)
- Improved cookstoves (3)
- Charcoal stove (4)
- Other (5) _____

Page Break



Q5.8 Are you aware of the issue of waste plastic being used as fuel amongst energy-poor households being investigated within the academic, industry or policy spheres?

- Yes (1)
- No (2)
- Not sure (3)

End of Block: Waste plastic as energy fuel

Start of Block: Other Energy Sources



Q6.1 Below are some reasons why households might burn waste plastic for household fuel.

Please rate the extent to which you agree with these statements.

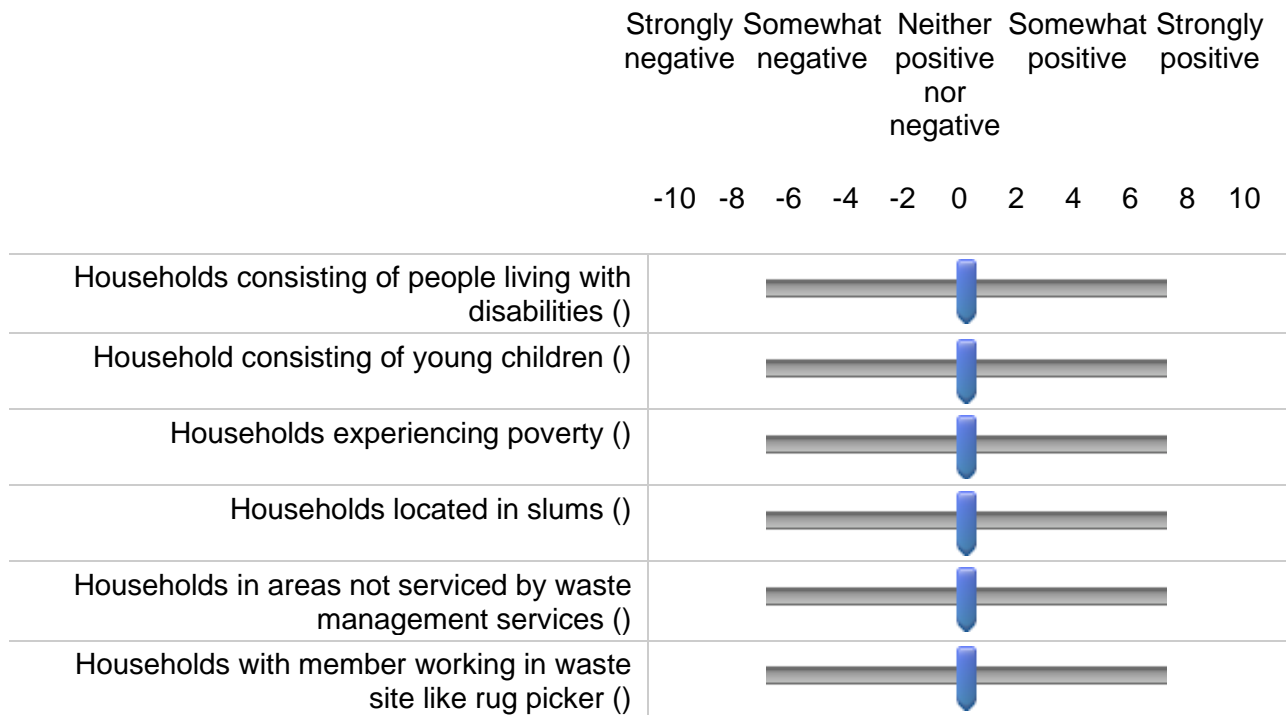
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Clean fuel like LPG are more expensive than waste plastic (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Firewood or charcoal are more difficult to access than waste plastic (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of awareness of the health impacts of burning plastic (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People burn plastic to manage excess plastic waste in their local environment (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plastic waste is a versatile fuel e.g., burning it is compatible with different stove types (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Burning waste plastic is a socially acceptable practice (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Other Energy Sources

Start of Block: Vulnerability and impact

Q7.1 Below are some socio-demographic factors potentially associated with burning waste plastic in your city.

Please select the factors you believe to be associated with the likelihood of burning waste plastic in your city from -10 to +10. -10 = strong and negative association (not likely to burn waste plastic as household fuel) and +10 indicates strong and positive association (most likely to burn waste plastic as household fuel)



Page Break



Q7.2 What do you believe are the major risks of burning plastic in households?

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
Fire hazards starting from inflammable plastic waste (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The toxic emissions impacting health due to chemicals packed or mixed in plastic. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Toxic chemicals from waste plastic that could contaminate food and water (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Women, children, people living with disabilities and senior citizens who are likely to spend more time indoors and are more likely to be impacted (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Vulnerability and impact

Start of Block: Policy consideration



Q8.1 In your opinion, how prevalent do you think burning waste plastic is in your city?

- Not prevalent at all (1)
- Slightly prevalent (2)
- Moderately prevalent (3)
- Very prevalent (4)
- Extremely prevalent (5)

Page Break



Q8.2 In your view, what might be a possible solution to the problem of burning plastic waste? Please rank in order of importance (1 = the most effective solution and 5 = the least effective solution). You can drag and drop the items into your chosen order.

- _____ Ban the use of plastic (1)
- _____ Improve and expand solid waste management services to informal settlements (2)
- _____ Increase clean energy access for low-income household (3)
- _____ Raise awareness about the negative impacts of burning plastics for fuel (4)
- _____ Increase access to alternative fuels like firewood and charcoal (5)
- _____ Convert plastic into a safer household fuel (6)
- _____ Other (7)

Page Break



Q8.3 Do you think converting waste plastic into a safer household fuel (like cooking fuel) would help to reduce the plastic waste problem, while simultaneously enabling energy access but still safeguarding household health?

- Definitely not (1)
- Probably not (2)
- Might or might not (3)
- Probably yes (4)
- Definitely yes (5)

Page Break

Q8.4 Please drag and drop the items (left side) to the most relevant cooking fuel (right side).

Solid fuel (Firewood, coal and crop residue)	Waste Plastic fuel	Clean fuel (LPG)	Electric cooking
_____ Cheapest (Most affordable at your city) (26)	_____ Cheapest (Most affordable at your city) (26)	_____ Cheapest (Most affordable at your city) (26)	_____ Cheapest (Most affordable at your city) (26)
_____ Most expensive (27)	_____ Most expensive (27)	_____ Most expensive (27)	_____ Most expensive (27)
_____ Most easily available (including around household areas) (18)	_____ Most easily available (including around household areas) (18)	_____ Most easily available (including around household areas) (18)	_____ Most easily available (including around household areas) (18)
_____ Lowest operation cost (36)	_____ Lowest operation cost (36)	_____ Lowest operation cost (36)	_____ Lowest operation cost (36)
_____ Most suitable for low income areas like slum (28)	_____ Most suitable for low income areas like slum (28)	_____ Most suitable for low income areas like slum (28)	_____ Most suitable for low income areas like slum (28)
_____ Most difficult to access (43)	_____ Most difficult to access (43)	_____ Most difficult to access (43)	_____ Most difficult to access (43)
_____ Most difficult to maintain (44)	_____ Most difficult to maintain (44)	_____ Most difficult to maintain (44)	_____ Most difficult to maintain (44)
_____ Most polluting (29)	_____ Most polluting (29)	_____ Most polluting (29)	_____ Most polluting (29)
_____ Least polluting (45)	_____ Least polluting (45)	_____ Least polluting (45)	_____ Least polluting (45)
_____ Most culturally appropriate (46)	_____ Most culturally appropriate (46)	_____ Most culturally appropriate (46)	_____ Most culturally appropriate (46)
_____ Most difficult to use for cultural practices (47)	_____ Most difficult to use for cultural practices (47)	_____ Most difficult to use for cultural practices (47)	_____ Most difficult to use for cultural practices (47)
_____ Very familiar to me (48)	_____ Very familiar to me (48)	_____ Very familiar to me (48)	_____ Very familiar to me (48)
_____ Very unfamiliar to me (49)	_____ Very unfamiliar to me (49)	_____ Very unfamiliar to me (49)	_____ Very unfamiliar to me (49)
_____ Overall most suitable for household in slum areas (50)	_____ Overall most suitable for household in slum areas (50)	_____ Overall most suitable for household in slum areas (50)	_____ Overall most suitable for household in slum areas (50)

_____ informal settlement are forced to use this due to their circumstances (30)

_____ The availability of this fuel is decreasing in cities (51)

_____ Zero-cost (free of charge) (52)

_____ informal settlement are forced to use this due to their circumstances (30)

_____ The availability of this fuel is decreasing in cities (51)

_____ Zero-cost (free of charge) (52)

_____ informal settlement are forced to use this due to their circumstances (30)

_____ The availability of this fuel is decreasing in cities (51)

_____ Zero-cost (free of charge) (52)

_____ informal settlement are forced to use this due to their circumstances (30)

_____ The availability of this fuel is decreasing in cities (51)

_____ Zero-cost (free of charge) (52)

End of Block: Policy consideration

Start of Block: Demographic information



Q9.1 What is your gender?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)



Q9.2 Please indicate your age in years (for example, 50)

- Click to write Form Field 1 (1)
-

Page Break



Q9.3 What type of organisation do you work for?

- University or Polytechnic or research centre (1)
 - Commercial entity (2)
 - Government agency (3)
 - Not-for-profit (NFP) or Civil society organisation (4)
 - Other (5) _____
-



Q9.4 What area does your work fall under?

- Natural sciences (1)
 - Engineering and technology (2)
 - Medical and health sciences (3)
 - Agricultural sciences (4)
 - Social sciences (5)
 - Arts and humanities (6)
 - Other (7) _____
-



Q9.5 What is the geographical coverage of your work?

- Multinational (1)
 - National (2)
 - City level (3)
 - Community (4)
-



Q9.6 Which best describes your highest completed level of education?

- No formal schooling (1)
 - Early childhood education (2)
 - Primary education (3)
 - Lower secondary education (4)
 - Upper secondary education (5)
 - Post-secondary non-tertiary education (6)
 - Short-cycle tertiary education (7)
 - Bachelor's or equivalent level (8)
 - Master's or equivalent level (9)
 - Doctoral or equivalent level (10)
 - Not elsewhere classified (11)
-



Q9.7 How long (in years) have you been engaged in your current field of work/research?

- Less than 2 year (1)
 - Less than 5 years (2)
 - Less than 10 years (3)
 - More than 10 years (4)
-



Q9.8 To which of the following categories do you belong?

- Researcher (1)
- Local government official or civil servant / community worker (2)
- Socially-engaged professional (3)
- Community leader (4)
- NGO or community-based organization personnel (5)
- Private operators and companies (6)
- Others (7) _____

End of Block: Demographic information
