

## Supplementary Materials File S1: Household survey in the district of Ahrweiler on the flood event of July 2021 – Excerpt of the questionnaire

### General introduction

In **July 2021**, were you living for rent or in your own property/property of close relatives?

- Rent
- Property/property of close relatives
- No answer

Where was/is your **July 2021** residential building located?

- Inside the special hazard “yellow” zone
- Inside the legally defined floodplain of July 2021
- Outside the legally defined floodplain of July 2021 but inside the new floodplain provisionally defined by law
- Outside new floodplain provisionally defined by law but inside the flooded area from July 2021
- Outside new floodplain provisionally defined by law and outside flooded area from July 2021
- No answer

How long have you lived/do you live at this location (**prior** to the July 2021 flood)?

**Note:** Please enter the year. If you do not know exactly, you can round to the decade.

In my apartment/house since \_ \_ \_ \_

Where do you **currently** live?

- In the same house/apartment as in July 2021 → Filter (next question was skipped)
- In temporary housing/ with friends/ relatives → Filter (next question was skipped)
- Permanently in another house/apartment in the same district
- Permanently in another district
- Permanently in another city
- No answer

Where is your **current** residential building located?

- Inside the special hazard “yellow” zone
- Inside the legally defined floodplain of July 2021
- Outside the legally defined floodplain of July 2021 but inside the new floodplain provisionally defined by law
- Outside new floodplain provisionally defined by law but inside the flooded area from July 2021
- Outside new floodplain provisionally defined by law and outside flooded area from July 2021
- No answer

## Experience with the July 2021 flood event

Did you have to leave your home due to a public call, an official order, or because of the damage?

Yes

No

→ Filter (next question was skipped)

No answer

After how many days or months were you able to return to your home permanently?

After 1-2 days

After about four months (end of November 2021)

After about a week

After about six months (end of January 2022)

After about two weeks

After about eight months (end of March 2022)

After about four weeks (end of August 2021)

Not until today

After about two months (end of September 2021)

No answer

Before the July 2021 flood event, did you know you lived in a flood-prone area?

Yes

No

No answer

## Restoration after the July 2021 flood event

What was the total financial damage to your inventory/personal belongings and building/property caused by the 2021 flood?

Under 500€

50,000€-74,999€

500-999€

75,000€-99,999€

1,000-4,999€

100,000€ or more

5,000-9,999€

No financial damage

10,000-24,999€

No answer

25,000-49,999€

Is it possible to refurbish your building?

Yes

No

No answer

Please compare your building/property and personal belongings before the flood and their current condition. Have the damaged building and personal belongings, such as appliances or furnishings, been repaired/replaced in the meantime, or do the building/property and personal belongings still have significant deficiencies and defects as a result of the flood impact?

1 = completely replaced	2	3	4	5	6 = significant deficiencies	No answer
<input type="checkbox"/>	<input type="checkbox"/>					

## Prevention & Risk Perception

Do you plan to move?

Yes

No

No answer

What are the reasons for your relocation?

**Note:** Please check off everything that applies to you.

The location is too dangerous for me.

Reconstruction/refurbishment is too expensive and/or too complex for me.

My place of residence no longer offers a quality of life.

I was living in a rented flat/house.

No answer

How important are the following factors to you when deciding on a new location?

	1 = completely unimportant	2	3	4	5	6 = very important	No answer
Short distance to former place of residence (e.g. because of neighbors, place of work)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Possibility of remaining in the same (associated) municipality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good connection to public transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good connection to local supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good social environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Joint move with other affected neighbors	<input type="checkbox"/>						
Flood-adapted construction of the new building	<input type="checkbox"/>						
Flood-proof location of the new building	<input type="checkbox"/>						
Sustainability and energy efficiency of the new building	<input type="checkbox"/>						
Financial support from the state	<input type="checkbox"/>						

What are key factors that influenced your decision to stay in the same location?

**Note:** Please check off everything that applies to you.

- I don't think a move is necessary because my residential building was not affected by the 2021 flood.
- I don't think a move is necessary because an extreme flood (like the July 2021 flood) is very rare.
- I don't think a move is necessary because my building can be protected from floods.
- I don't have the strength/energy to move.
- I don't have the finances to move/I cannot adequately use the reconstruction funds to move to another area.
- I can't sell my building because the market value has dropped too much.
- I can't find any suitable replacement areas nearby.
- I feel strongly rooted in the place I live.
- I wasn't able to deal with the issue of "settlement retreat/relocation" during reconstruction.
- No answer

How likely do you think it is that your current apartment/house will be affected by flooding again?

1 = very unlikely	2	3	4	5	6 = very likely	No answer
<input type="checkbox"/>						

How do you assess the impact of a possible future flood on yourself personally?

1 = not bad	2	3	4	5	6 = very bad	No answer
<input type="checkbox"/>						

## Reconstruction process

One possible measure in the context of reconstruction is a partial settlement retreat, i.e. the residential and working locations are partially not rebuilt at the same, flood-prone location or are deconstructed.

To what extent do you agree with the following statements?

	1 = disagree at all	2	3	4	5	6 = agree completely	No answer
I consider a settlement retreat to be a meaningful measure in terms of risk prevention and climate change adaptation	<input type="checkbox"/>						
Particularly sensitive or critical infrastructures (e.g. hospitals, schools) should be relocated from the immediate vicinity of the Ahr River.	<input type="checkbox"/>						
I feel well informed regarding the settlement retreat and floodplain designation	<input type="checkbox"/>						

## Information about your person and household

How true is the following statement for you personally?

	1 = not true at all	2	3	4	5	6 = absolutely true	No answer
I am someone to whom it is important to live in a safe environment and who avoids anything that threatens my own safety.	<input type="checkbox"/>						

To which gender do you assign yourself?

- |                                 |                                    |
|---------------------------------|------------------------------------|
| <input type="checkbox"/> Female | <input type="checkbox"/> Divers    |
| <input type="checkbox"/> Male   | <input type="checkbox"/> No answer |

How old are you?	
<input type="checkbox"/> 18-19 years	<input type="checkbox"/> 65-69 years
<input type="checkbox"/> 20-29 years	<input type="checkbox"/> 70-74 years
<input type="checkbox"/> 30-39 years	<input type="checkbox"/> 75-79 years
<input type="checkbox"/> 40-49 years	<input type="checkbox"/> 80 years or older
<input type="checkbox"/> 50-59 years	<input type="checkbox"/> No answer
<input type="checkbox"/> 60-64 years	

What is your household's total monthly income after taxes and social contributions (net income)?	
<b>Notes:</b>	
- Please include all income you have (e.g. also income from rent, housing subsidy, pension).	
- If you live in a shared apartment, please enter only your own income.	
<input type="checkbox"/> Under 900€	<input type="checkbox"/> 2,600-3,599€
<input type="checkbox"/> 900-1,299€	<input type="checkbox"/> 3,600-4,999€
<input type="checkbox"/> 1,300-1,499€	<input type="checkbox"/> 5,000€ or more
<input type="checkbox"/> 1,500- 1,999€	<input type="checkbox"/> No answer
<input type="checkbox"/> 2,000-2,599€	