



Impacts of climate change: still an abstract threat for the French

Amongst the different environmental issues, climate change is the main concern of the French. However, the risk is difficult to apprehend in concrete terms. When asked about the possible consequences of climate change for them, a quarter of the French had no idea of potential impacts. Furthermore, 15% thought there would be no negative effect at their level. Extreme weather events and climate-change induced health problems are the main fears spontaneously cited in the survey, followed by territorial impacts and deterioration of living conditions. Nonetheless, more than half of the spontaneous responses remain impersonal, mainly focus on the global impacts of this phenomenon. This distant, or even abstract, relationship some French people have with this issue appears to be linked partially to the respondent's educational level and age.

Starting out from the observation that the French consider global warming as their top environmental concern, a question was put to them: "What impact could climate change have in the future for you personally?". Beyond the global concern about this phenomenon, the challenge was to capture personal fears expressed as regards the consequences that could directly impact them in the future.

After the period 2005-2007 marked by increasing concern among citizens about climate change, the issue lost its influence in the period that followed (2007-2011). Since then, the level of concern has gradually returned to its 2009 level. With the exception of a recent survey (Cese, 2015) in which 72% of respondents said that climate change will impact their daily lives over the next ten years, existing studies (Ademe, SOeS, etc.) are primarily focused on the representations of climate change in itself and not how the climate threat is perceived on a personal basis. In fact, little if any information is available about the perceived consequences of this threat. To fill this gap, the survey on the perception of risk exposure (Eser 2013) integrated this issue in order to identify what the personal consequences of climate change could be for the French. Unlike the rest of the questionnaire in which different response options were offered to the respondents, this 'open' question allowed spontaneous answers.

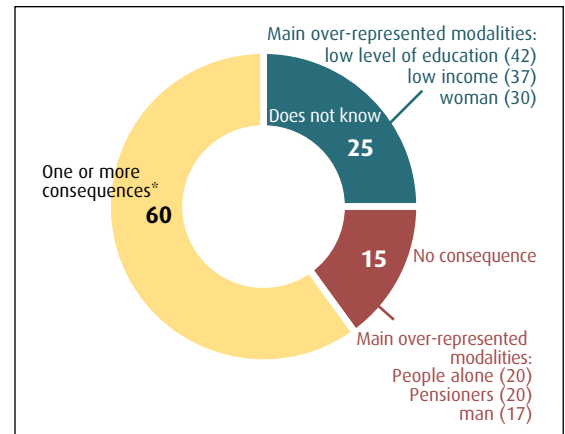
A quarter of the French do not know what the consequences of climate change might be for them

The overall distribution of answers revealed three main groups (figure 1): those who do not know what the consequences of climate change might be for them (25%), those who believe that this phenomenon will not impact them (15%) and those who spontaneously cite the effects they believe it will have (60%). Unlike surveys that tend to guide respondents by asking them

to choose the answer that seems most appropriate to them from a predefined list (WWF, 2015), this open question shows that a large share of the French do not know what risks they incur due to climate change.

Figure 1: distribution of spontaneous answers to the question "What consequences could climate change have in the future for you personally?"

As a %



Note: * The distribution of the various types of consequences (impersonal, weather, health, territorial, etc.) cited by respondents is shown in figure 2.

Source: SOeS, survey on risk exposure perception (Eser), 2013

What the French feel as regards risks related to climate change

42% of the French living in mainland France and 56% of those living in the overseas departments (DOM) feel exposed to risks associated with climate change. This feeling of exposure is particularly present in the DOM regions exposed to cyclonic risks, in municipalities in south east France, in those that have suffered frequent natural disasters and among the more educated respondents. However, younger (18-25) and older (65 and over) respondents are less likely to feel they are significantly exposed to climate change risks.

Source: *Les Français face aux risques environnementaux* (Eser 2013), CGDD/SOeS, *Études & documents*, n° 128, July 2015, 82 p.

The proportion of respondents not knowing what might happen on a personal level increases in reverse proportion to the level of education and income: only 16% of the best educated and highest earners say they do not know. This proportion is more than twice that figure among French people with low levels of income and education. This lack of knowledge is also particularly significant (32%) among the younger urban population.

Individuals past experience also influences their relationship with the future. Respondents who report having experienced physical (14%) or material (18%) damage following a disaster – natural or technological – are more likely to cite climate change consequences that could eventually affect them.

While fewer men say they are unaware of the consequences, they are however more likely than women to deny the existence of climate threats on a personal level. A significant over-representation of pensioners and people living alone was also observed among those persons declaring that climate change will have no consequences for them personally.

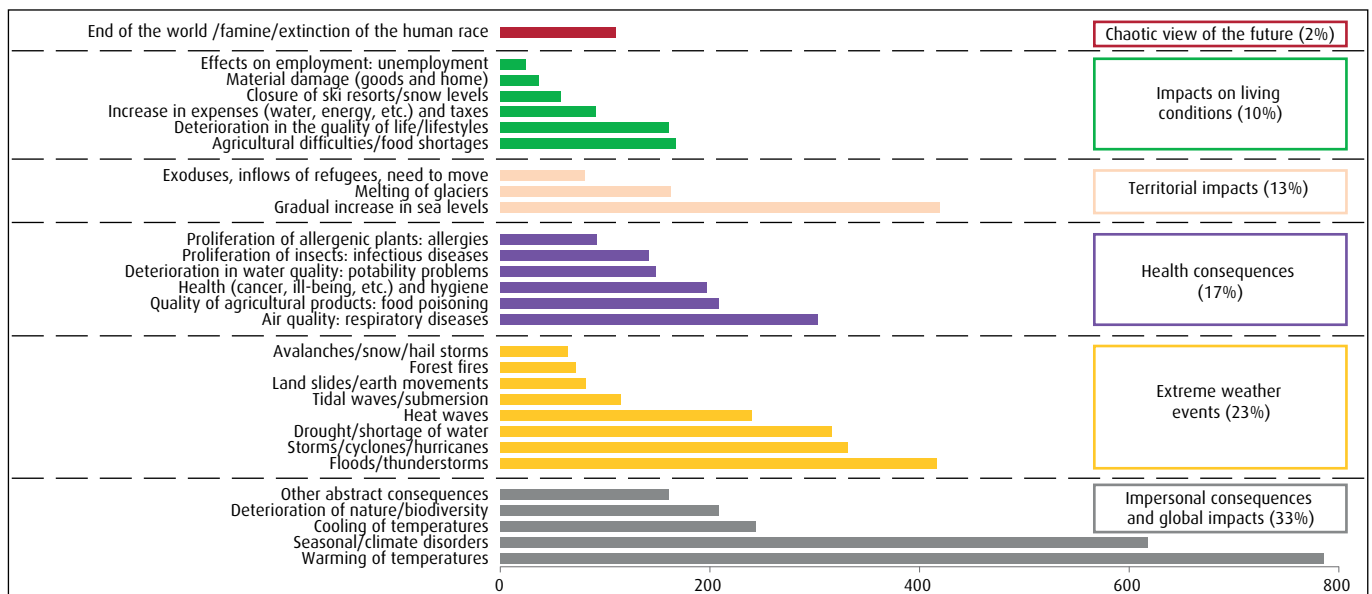
Global impacts, natural disasters, health problems, deterioration in living conditions: a range of concerns about the future

The impacts spontaneously cited by 60% of respondents can be grouped into six main themes (*figure 2*). Among these, the group of consequences that clearly stands out contains answers that may seem off topic in relation to the question asked because these answers first and foremost concern the global impacts of climate change (higher temperatures, seasonal disorders, etc.) and not direct impacts on individuals. These impersonal consequences represent more than half of the answers.

Specifically, a second category includes references to the occurrence of extreme weather events, such as floods, storms and droughts. Other effects feared on a personal basis, the consequences of climate change on health are frequently mentioned in relation to various types of environmental pollution. Fear of cancer, as well as references to the discomfort induced by the changes are also common health concerns. Another set of consequences studied breaks down this latter idea into the different ways climate change is perceived as being able to impact the quality of life and impose lifestyle changes. Concerns are expressed in particular with regard to the quality and quantity of the food supply. Similarly, some households seem concerned about the economic impact of this phenomenon, both from the point of view of expenditure incurred as well as material damage or unemployment caused. Geographical transformations induced by climate change (rising sea levels for example) give rise to concerns with respect to territorial and demographic impacts. Thus, a small share of the answers given focuses on mobility situations suffered (need to move or inflows of refugees) which might arise. Finally, a last category bringing together some one hundred answers shows the chaotic future vision expressed by some French people in the face of a phenomenon they tend to perceive as being inevitable and disastrous for the planet.

Figure 2: Breakdown of consequences mentioned

As the number of occurrences



Note: rising temperatures was cited 785 times as something that could be a personal consequence of climate change. 33% of the impacts mentioned were classified as "impersonal consequences".

Note: the chart shows the thematic distribution of the 4,548 consequences mentioned. A small group (n = 75) of "unclassifiable" consequences does not appear on this chart. The total percentage is therefore slightly less than 100%.

Source: SOeS, survey on risk exposure perception (Eser), 2013

A perception of climate risks influenced by the experiences of respondents

Among the factors that most significantly influence the answers given (figure 3), is the level of education. Those with few if any qualifications mention the occurrence of extreme weather events less than the others, but are significantly more likely to fear a chaotic future. The more educated respondents cite the consequences of climate change on their quality of life more frequently. Professional activity can also influence the answers: respondents working in agriculture worry much more than the others (22% versus 7%) about health problems that could arise from deterioration of agricultural food products.

The respondents who have personally suffered the consequences of a disaster in the past also tend to give concrete answers to the question asked: they are significantly over-represented in the "extreme weather events" and "territorial impacts" categories, as well as two related sub-categories ("storms" and "rising sea levels").

Similarly, age influences the answers: respondents aged 50 and over mention *extreme weather events* more frequently than others. Compared to the 18-24 age group, they are almost three times as many to speak of storms, heat waves or droughts. On the other hand, under 50's are more concerned about the social and economic impacts of climate change than those over 50. Members of the 25-34 year old age group are twice as likely to refer to a possible deterioration in their standard of living than the respondents aged 65 or over.

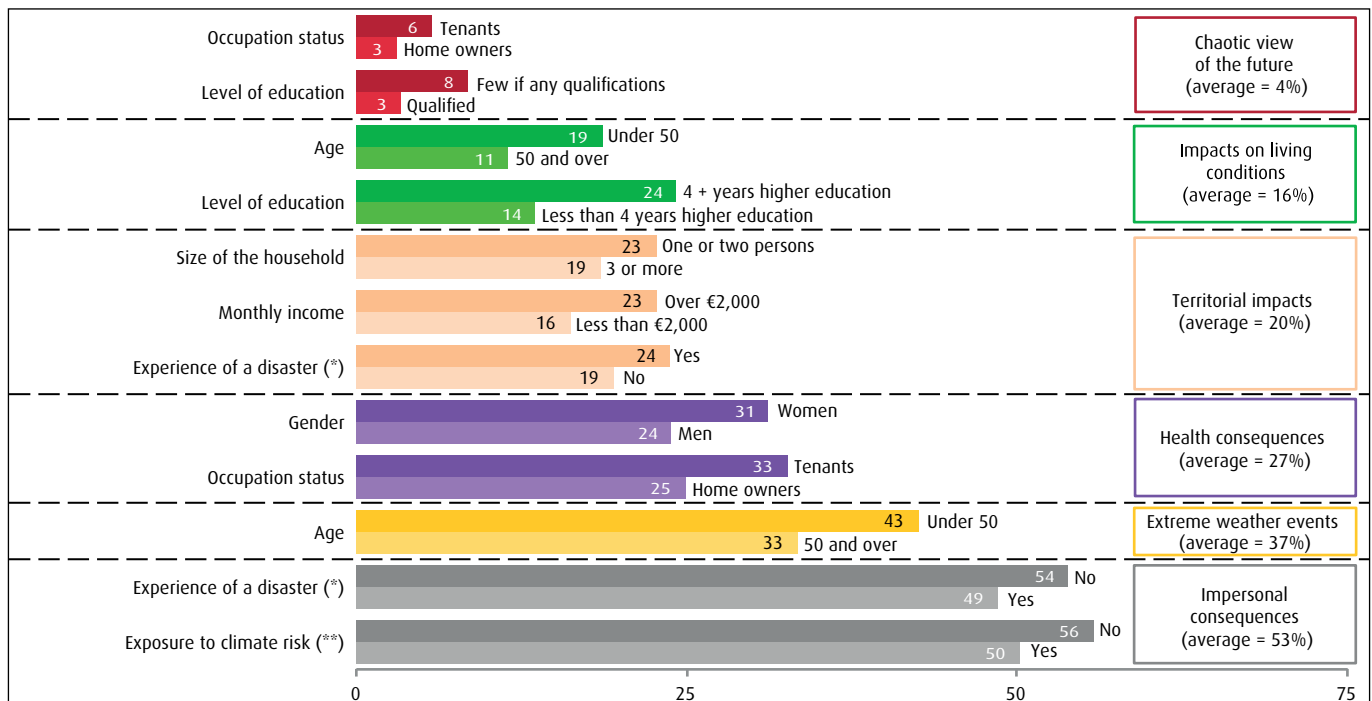
Territory-based apprehension about expected impacts

The place of residence of respondents also influences the propensity to mention territorial issues: in coastal municipalities, there is a strong over-representation, particularly in mainland France, with respect to the risk of rising sea levels (27% versus 13% on average). In overseas territories, respondents exposed to cyclonic risks tended to massively cite extreme weather events (51%) and, more specifically, storms and hurricanes (21%). Compared to the rest of the population, the Ile-de-France population seems more concerned about the consequences of climate change on health (35%). Similarly, the more the respondents live in large cities the more they are likely to fear health risks resulting from a potential worsening of air pollution. In general, persons residing in those municipalities most exposed to climate threats are 20% less likely than the others to give an impersonal answer to this question.

Other significant differences exist: men worry more about territorial impacts and in particular a rise in sea levels, while women are more concerned about health issues. Home owners are more likely to worry about the consequences of storms and the risk of gradual increase in sea levels. The mention of the territorial impacts of climate change is in fact determined by the size of the household and respondents income. This result is more frequently cited by people who say they earn more than €2,000 a month and those living alone or with one other person.

Figure 3: Principal determinants of consequences mentioned

As a %



Note: on average, 4% of respondents who cited a consequence said they had a chaotic vision of the future. Among these, 6% of tenants compared to 3% of home owners responded in this way.

Note: since respondents could cite several types of consequences, the total of average values is greater than 100%; (*) the experience of a disaster corresponds here to the fact of having suffered material damage; (**) exposure of respondents is presumed if they live in one of the 5,717 communes for whom the climate risk exposure index (Onerc) is deemed to be strong.

Source: SOeS, survey on risk exposure perception (Eser), 2013

What information on climate risks?

The results of this study must be viewed in the light of the information available to the French on this subject, because the perception of climate change is often linked to the media treatment that it undergoes (Aykut *et al.*, 2012). Comparative research carried out in six countries on the treatment by the press of the climate issue (Painter, 2013) found that the *dominant tone* of French articles is essentially characterised by the presence of an *implicit risk* (60%), to the extent that the focus is placed on the global nature of the expected "disaster". Then come *uncertainty* (26%) and the *explicit risk* (14%). By insisting in this way on the seriousness and disastrous aspects of climate change, while neglecting to specify the nature of the risks incurred, the interpretative framework provided by the press to its readers induces a form of abstraction that can be found in the results presented here. This is why the author of this research advocates giving more prominence to risk language (probability of events, precautionary principle, insurance stakes) in communication on climate change. The challenge is to make the threat from climatic risks more concrete, while staying away from the doubts aroused by the media coverage of a scientific controversy that is nonetheless marginal (Kortenkamp & Basten, 2015).

Methodology

The survey on the perception of risk exposure (Eser) was carried out over the phone in late 2013 by LH2, on behalf of the SOeS, among a representative sample of 4,725 French people (including 702 in overseas departments) aged 18 and over, selected according to the quota sampling method: gender, age, Profession and Socioprofessional Category of the head of household (PCS level 1), size of the urban area.

In the context of this open-ended question, recoding work led to the processing of 4,548 consequences, cited by more than 2,800 respondents. This work of aggregating answers took place in two stages: first by breaking them down into some thirty categories and then structuring the consequences referred to into six major consistent and statistically robust themes. Subsequently, logistic regressions helped identify the determinant factors.

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For more information:

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