INTEGRATION OF CLIMATIC CHANGE IN RISK MANAGEMENT : A FRENCH APPROACH

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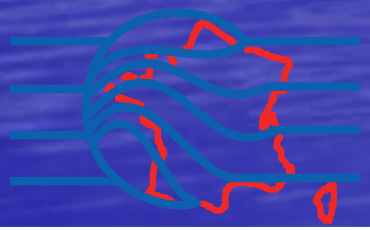

Association Française pour la Prévention des Catastrophes Naturelles

(AFPCN)

Integration of climatic change in risk management : a French approach

Foreword

The title does not mean that there is one French approach, but that the different approaches of French concerned parties (scientists, politicians, NGO's and associations, industry …) reflect a common natural situation and culture.

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Integration of climatic change in risk management : a French approach

I. French context
II. AFPCN Scientific Council approach
III. Findings
IV. Recommandations
V. New context for action

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I. French context

- Natural risks management policy
- Policy concerning climatic change

II. AFPCN Scientific Council approach

- The uncertainties on climate measurements and validity of prospects from models.
- Climate variability and extreme events.
- Reactions of ecosystems.
- Sociologic aspects, representations and cultural attitudes.

III. Findings

- Uncertainties.
- Scientific controversies.
- The relationship between adaptation and mitigation policies with regard to climate change.
- Representations of change : denying or blowing up risk.

Scientific controversies

The following table offers a summary of the current standing of the main controversies today:

Issue	Reason for debate	Critical view
1 The complexity of the climate system	Cannot be dominated by the complication of the models; transitions through chaotic states are inherent in the climate system.	Recognised in principle by all, but it is still sometimes implied that this is a classic area of uncertainty which progress will gradually decrease
2 Forecasts	The models cannot act as forecasts; they provide projections based on artificial scenarios	A recognised fact, but one soon forgotten in discourse and, above all, through the copying of maps without warning
3 Earth's average temperature	A summarised indicator	Debate as to the basis for calculation and the extent of its significance
4 Developments over the last 20 years	Statistically, often insignificant, especially at the regional level	Often unfounded assertions on the developments

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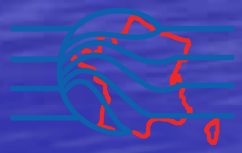
Scientific controversies

Issue	Reason for debate	Critical view
5 Climate variability, meteorological hazards	Considerable, with developments ill-determined by climate models	Increase often claimed, but without substantiation. The caution displayed in the GIEC's report is quickly forgotten
6 Cyclone hazard	Uncertainty, even in the North Atlantic, the only area where an increase has occurred recently	Often stated to be on the rise
7 Flooding or drought hazards	Variable trend, depending on the type of event: in France, negative growth in plain flooding, heightening of quick, one-off events	Extreme hazards have always been stated to be on the rise (by commentators more than by climatologists)
8 The water cycle and its impact on the greenhouse effect	Much remains unknown	Relatively hidden
9 Sea level	Definite rise, multi-secular effect of warming; great uncertainties as to 100-year projections and impacts	Sometimes very high forecasts announced on a 100-year timeframe; GIEC accused of not having selected higher recent forecasts
10 Acidification of ocean water	Definite effects on coral reef; outlook?	Not always mentioned



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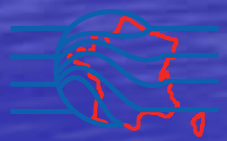
Scientific controversies

Issue	Reason for debate	Critical view
11 The carbon cycle and biosphere	Many unknowns	Generally hidden by overall balance figures
12 The extinction of species	Definite, but doubts remain on what percentage is to be ascribed to climate change. Adaptation responses are poorly estimated.	Misplaced oversimplification, attention focused on a number of stand-out species, positive effect on the evolution of ecosystems unknown
13 The opinion of the climatologist community	Majority	The consensus system and expression of subjective probabilities by the GIEC are hotly contested. The opinions intended for decision-makers in the GIEC reports are written with the politicians, hence possibly leading to insidious denaturing
14 The opinion of the entire scientific community	Not stated	Ambiguity of the term "scientific community"; many of the areas where reservations are expressed about the GIEC's assertions are not appropriately involved (could they be ?)
15 The role of the markets following the rarefaction of fossil fuels	Vital but inadequate for mitigation; the effects of shocks and conflicts are major.	Certain aspects are always left out of scenarios and general presentations; the markets are addressed only with respect to emission rights



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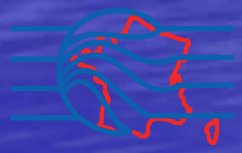
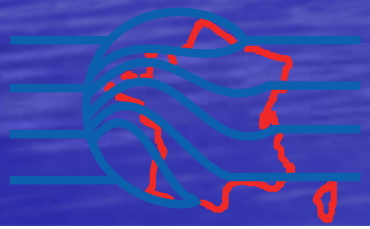
Scientific controversies

Issue	Reason for debate	Critical view
16 Promotion of nuclear energy	Nuclear power is one out of many possible responses	Nuclear power, often hidden, has its own controversies
17 Adaptation versus mitigation	Two responses, two complementary policies of equal importance and urgency	Both have their proponents. The GIEC has really focused on mitigation. Heightened imbalance in France.
18 Economic models versus climate models	The economic models do not cover all scales; the climate models wipe out the effects of temporary chaos	The GIEC's scenarios ignore the economic retroaction of the markets and mitigation policies. Ideological bias in the models integrated (Stern, for instance). Dead-end debate on actualisation rate.



IV. Recommandations

- Incorporating all disciplines.
- Geographical scales, from the global to the local.
- Societal engineering of risk treatment, a democracy of responsibility.
- New vigilance with regard to extreme risks.



V. New context for action

- French new governmental organisation.
- EU initiatives.
- Research (PERBERES project).
- Public debate on catastrophism.