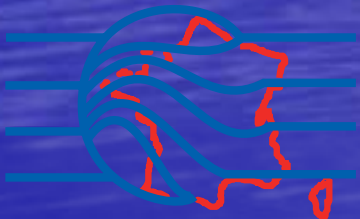


INTEGRATION OF CLIMATIC CHANGE IN RISK MANAGEMENT : A FRENCH APPROACH

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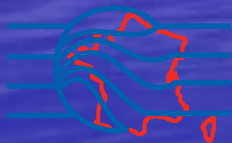


Association Française pour la Prévention des Catastrophes Naturelles
(AFPCN)

Integration of climatic change in risk management : a French approach

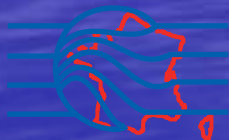
Foreword

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.



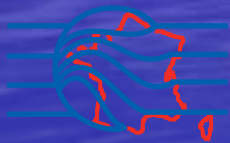
Integration of climatic change in risk management : a French approach

- I. French context
- II. AFPCN Scientific Council approach
- III. First findings
- IV. 6 recommandations
- V. A new French frame for action



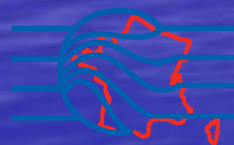
I. French context

- Natural risks management policy
- Behaviour towards climatic change



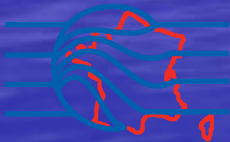
II. AFPCN Scientific Council approach

- 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

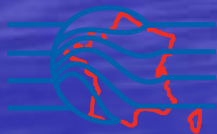
- Uncertainties.
- Scientific controversies.
- Impacts in France
- Representations of change : denying or blowing up risk.



Scientific controversies

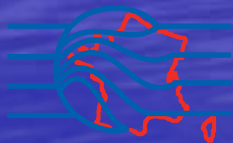
The following table offers a summary of the current standing of the main controversies today:

| Issue | Reason for debate | Critical view |
|---|---|---|
| <i>1 The complexity of the climate system</i> | 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 |
| <i>2 Forecasts</i> | 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 |
| <i>3 Earth's average temperature</i> | A summarised indicator | Debate as to the basis for calculation and the extent of its significance |
| <i>4 Developments over the last 20 years</i> | Statistically, often insignificant, especially at the regional level | Often unfounded assertions on the developments |



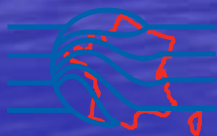
Scientific controversies

| Issue | Reason for debate | Critical view |
|--|--|--|
| 5 <i>Climate variability, meteorological hazards</i> | 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 <i>Cyclone hazard</i> | Uncertainty, even in the North Atlantic, the only area where an increase has occurred recently | Often stated to be on the rise |
| 7 <i>Flooding or drought hazards</i> | 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 <i>The water cycle and its impact on the greenhouse effect</i> | Much remains unknown | Relatively hidden |
| 9 <i>Sea level</i> | 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 <i>Acidification of ocean water</i> | Definite effects on coral reef; outlook? | Not always mentioned |



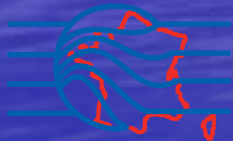
Scientific controversies

| Issue | Reason for debate | Critical view |
|---|--|---|
| <i>11 The carbon cycle and biosphere</i> | Many unknowns | Generally hidden by overall balance figures |
| <i>12 The extinction of species</i> | 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 |
| <i>13 The opinion of the climatologist community</i> | 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 |
| <i>14 The opinion of the entire scientific community</i> | 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 ?) |
| <i>15 The role of the markets following the rarefaction of fossil fuels</i> | 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 |



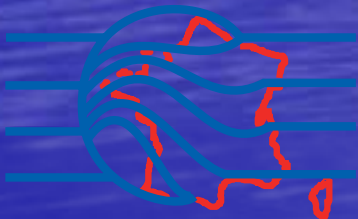
Scientific controversies

| Issue | Reason for debate | Critical view |
|---|---|--|
| <i>16 Promotion of nuclear energy</i> | Nuclear power is one out of many possible responses | Nuclear power, often hidden, has its own controversies |
| <i>17 Adaptation versus mitigation</i> | 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. |
| <i>18 Economic models versus climate models</i> | 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. 6 recommandations

- Balance and integrate adaptation and mitigation
- Incorporate all disciplines.
- Act at geographical scales, from the global to the local.
- Societal engineering of risk management, a democracy of responsibility.
- Exploit crisis, be prepared to revival
- New vigilance with regard to extreme risks.



V. A new French frame for action

- French new governmental organisation.
- Local level
- World level
- EU initiatives.

