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23 -25 September 2013, Oslo, Norway

Case study of
the national french strategy of adaptation

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The national french strategy of adaptation

- **Expresses the views of the State** on the way in which the question of adaptation to climate change should be tackled.

- Involves **preparing the country to face the upheavals** which will result from variation in the planet's climate which will affect both the lifestyle of the French as well as all sectors of the community.

- Just as international efforts, aimed at **limiting the strong growth of greenhouse gas emissions**, deserve to be encouraged and strength, **it is now also necessary to begin preparing for living in a modified climate**.

- Has been **drawn up within the framework of a broader dialogue,** undertaken by ONERC, the Observatoire national sur les effets du réchauffement climatique (National Observatory on the Effects of Global Warming) involving the various sectors of activity and civil society under the leadership of the Inter-ministerial Délégué Interministériel au Développement Durable (Interministerial Delegate for Sustainable Development).

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The national french strategy of adaptation

- Has been **validated by** the Comité interministériel pour le développement durable (**Interministerial Committee for Sustainable Development**) established by the Prime Minister on 13 November 2006.

Four major goals are identified :

- Public health and safety.
- Social aspects : inequalities with respect to the risk.
- Limiting the costs and benefiting from the advantages
- Preserving the natural heritage.

Several avenues of action are proposed, as preconditions for drawing up the national adaptation plan which will define a set of detailed measures to be taken at the various decision-making.

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Further informations :

http://www.developpement-durable.gouv.fr/The-French-National-Strategy-for.html

The national climate change adaptation plan

Programme law of 3 August 2009, relating to the implementation of the Grenelle Environment Forum, makes provision in Article 42 for "*the preparation of a National Adaptation Plan for a variety of areas of activity by 2011*".

The Plan aims to plan adaptation actions, prevent inappropriate adaptation, ensure consistency across public policy measures relating to adaptation.

It aims to present measures designed to help France prepare for and exploit new climatic conditions in France **for the next five years,** covering the period 2011-2015.

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The national climate change adaptation plan

Given the uncertainty surrounding climate change predictions and evaluations of the anticipated impacts of climate change, **several priorities** have informed the drafting of the plan :

- **increasing current knowledge** in all fields, including the use of a socio-economic approach ;
- **defining methodologies** for mainstreaming adaptation ;
- **reinforcing observation and alert mechanisms**.

This Plan contains a large number of actions and measures relating to research and observation.

It is a set of 84 actions expressed in 230 measures.

Funding for the plan should be approximately 171 million euros, excluding civil service staff costs.

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Most important milestones

1999 - Fund for research : impact and adaptation (GICC)

2001 - Law : fight against climate change as national priority

2006 - Strategy : 43 recommendations

2009 - Assessement report : costs of impacts
Grenelle law : national plan to be adopted in 2011

2010 - Consultation : 3800 people, 8500 opinions

2011 - Plan : 20 sheets, 84 actions, 240 measures

2013 - Plan : midterm evaluation

2015 - Plan : final evaluation

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Action sheets of the plan

- Health
- Water ressources
- Biodiversity
- Naturel hazards
- Agriculture
- Forest
- Fisheries and aquaculture
- Energy and industry
- Infrastructures and transport systems
- Urban planning and built environnement
- Tourism
- Information
- Education and training
- Research
- Funding an dinsurance
- Coastline
- Mountain
- European and international action
- Governance

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Natural hazards action sheet

Climate change will mainly be reflected :

- in widespread pressure on low-lying coastlines,
- an increased risk of forest fires
- a rise in damages caused by shrinkageswelling of clay soils.

Mountain areas, which are very sensitive to changes in temperature and precipitation, are already being affected by changes which are likely to alter the phenomena which trigger natural hazards.

Current policy for the prevention and management of natural hazards provides an appropriate framework to respond to these issues.
But certain aspects are strengthened and future changes are foreseen.

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Natural hazards action sheet

Action n°1: Develop knowledge (hazards, issues, methods) in the various sensitive areas :

improve awareness of natural hazards today and projections for the future, detecting trends for change and developing methods to analyse and evaluate natural risks.

Action n°2 : Extend observation and make data available :

establish a natural hazard reference baseline prior to measuring changes associated with climate change,

organise monitoring and availability of data, in association with developing a natural hazard observatory.

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Natural hazards action sheet

Action n°3: Standardise the concept of vigilance, alerts and the associated mechanisms and make systematic provision for lessons learned feedback

This action makes provision for three measures : monitoring the evolution of forest fire risk, gradual standardisation of weather monitoring, and the definition of a reliable lessons learned feedback process following major incidents (floods, forest fires, landslides, etc.).

Action n°4 : Mainstream the impact of climate change on natural hazards in urban development management :

defining the terms for mainstreaming potential risks associated with climate change in urban planning documents, on the one hand, and in specific natural hazard prevention documents, on the other hand.

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Natural hazards action sheet

Action n°5 : Reduce vulnerability and improve resilience and climate change adaptation

The main focus is methodological studies : producing reference guides relating to adapting urban developments and coastal defences, forest stands, construction measures to fight shrinkage-swelling of clay soils and sustainable development tools.

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Illustration : the case of flood risk

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Flood risk in France today

- 17 millions of people exposed to fluvial flood risk
- 1,4 millions of people and 850 000 jobs exposed to coastal flood risk
- 20% of houses exposed to coastal flood risk are on one level
- Cost of floods : 650 to 800 million euros each year, without extreme phenomena.

Paris 1910

Saint-Laurent (Pyrénées orientales, novembre 1999)

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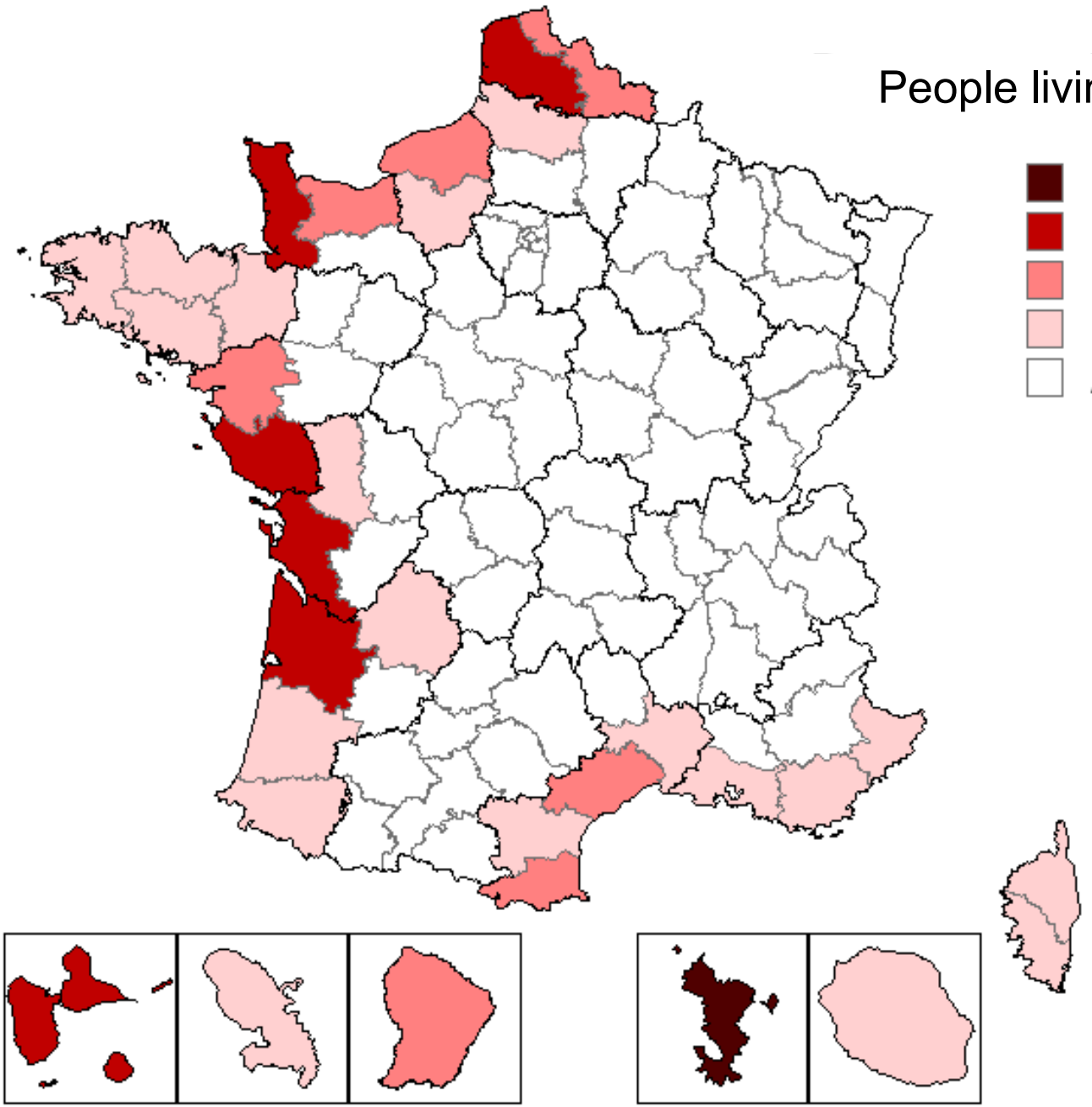
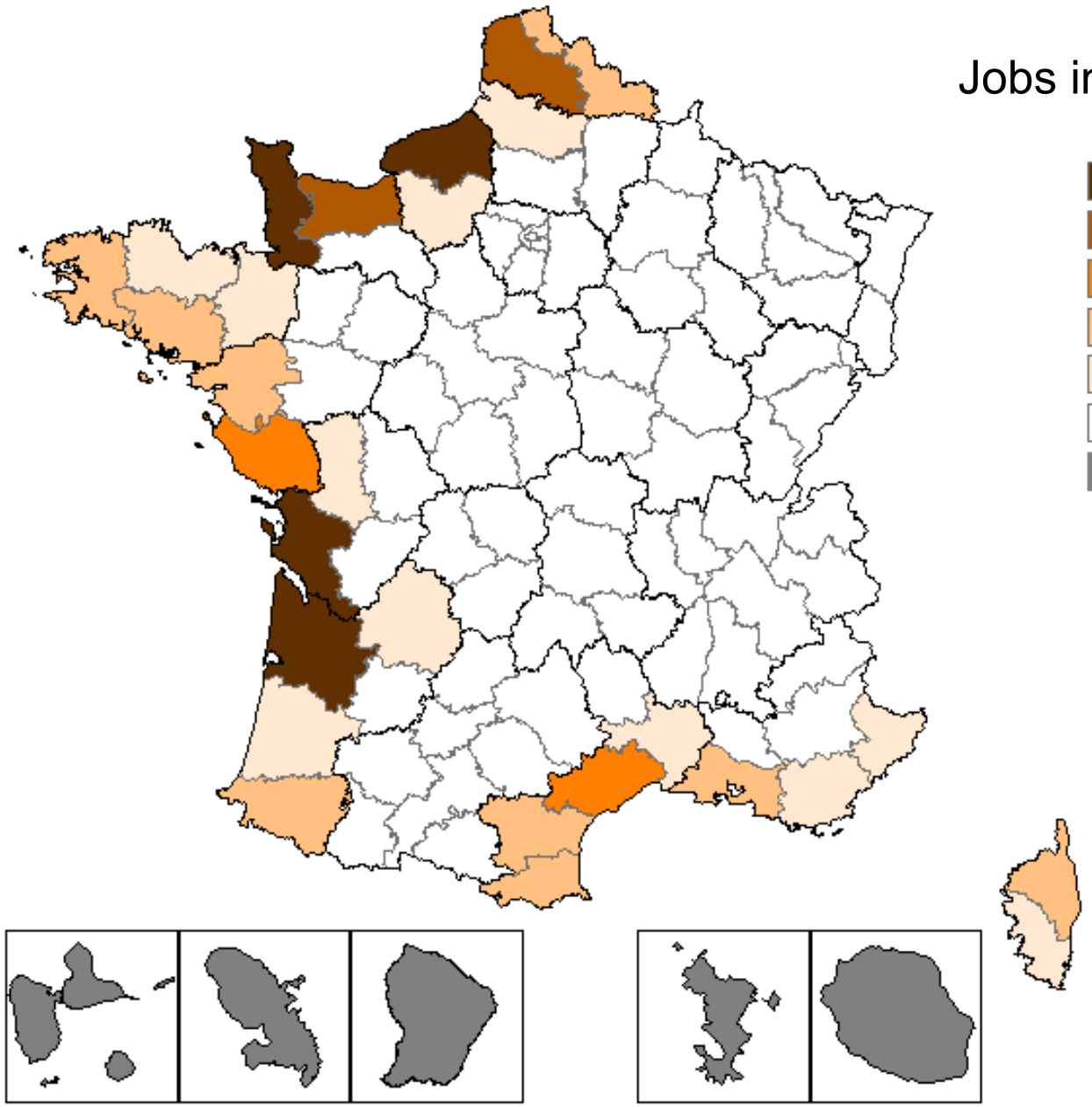
Flood risk in France today



Flood risk in France today

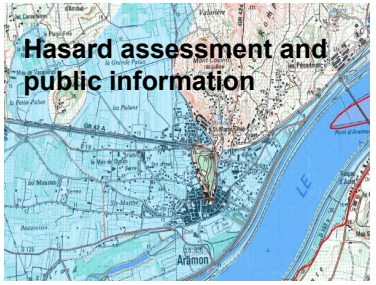


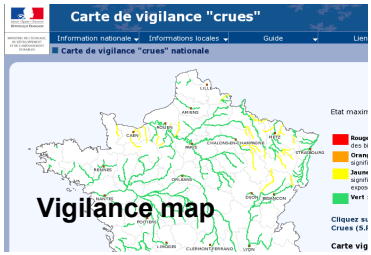
Flood risk management in France

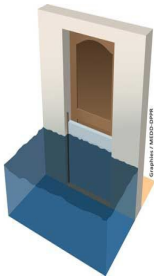
What tools do we already have ?

- Evaluation of flood hazard and risk
- Public information on flood risk, education
- Control of land use in floodable areas
- Flood forecasting (22 services), vigilance map and flood alert organization (mayors, prefects)
- Reduction of vulnerability, development of resilience
- River protection measures (dynamical slowing down systems, dams, embankments, …)
- Preparedness and management of crisis

→ Current policy for the prevention and management of natural hazards provides an appropriate framework to respond to adaptation issues. But...







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Flood risk and climate change adaptation

… certain aspects are strengthened and future changes are foreseen.

Example : introducing climate change values into levels of floods

Difficulties to choose CC scenarios for river floods (uncertainties), easier for coastal floods (more robust signal)

→ What is really new in floods prevention documents : the references of coastal floods level have to introduce overvalues of 20 cm and 60 cm

→ it allows to adapt the urban developments either by forbidding the new constructions in the most exposed areas, or by adapting the new constructions to the future levels of the see

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Merci de votre attention