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Risk prevention plans in France

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**Flood prevention conference in Bonn 5-6/2/2003 :
International exchange of experiences**

From *force majeure* to solidarity and planning : French recent changes

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In 1982, the new left wing government passed a law on 5 types of natural catastrophes, including floods and landslides. It developed two types on measures, one concerning better damage coverage, the other creating new land use plans called Risk Exposure Plans. But the first type was developed at national level while the second one was to be done by mayors at local level, and this creates a problem now.

The damage coverage part is organised through insurance companies: every French house and car insurance premium is now subject to a compulsory extra charge of 12% (initially 6% but soon increased to 9 and last year to 12), and the money goes to a Fund on natural hazards, but is kept by insurance companies. When there is a flood, if it is considered as exceptional, mayors can request the Prefect to declare the state of natural catastrophe in the concerned area, and then insurance companies cover the damages. If the money were to be insufficient (e.g. in case of an earthquake in Nice), the Government would pay the rest. This allows to offer much better coverage to many people who otherwise would be ruined, insurance arguing *force majeure* not to pay. In theory, insurance companies are not allowed to raise the insurance premiums after a 'cat'nat', except if floods happen repeatedly in the same area.

The prevention part is that all local authorities subjected to natural hazards must make risk exposure plans (now re-labeled PPR, risk prevention plans), in which they must ban all construction in the red zones, subject construction to constraints (e.g. above ground elevation) in the blue zones. Then people living in the floodable areas were supposed to make flood prevention investments for a minimum of 10% of their house value in 10 years, but this is difficult to control.

Like in Germany, the first type of measure is under scrutiny of the European Commission, because it breaches the principle of free choice of insurance. One can however argue that flood is like a common good which requests a form of subsidiary approach which is neither the structural measures of engineers nor the pure individual responsibility of economists. And the argument can be supported by the very nature of water which is *de facto* a common property in most European countries.

A more serious problem is that these two measures organise land use control at a different level than the solidarity mechanism: local authorities are tempted to underestimate the sizes of the zones, precisely because they can anticipate to obtain support from national solidarity in case of floods. It can thus have a perverse effect on the long run which would offset the advantages of damage coverage. This is why some have argued in France that the issue should be tackled by the *Agences de l'eau*, which would levy a new type of tax on impervious surfaces and bring support to those who reduce flood risks (floodplain restoration). But the issue is still not solved after 15 years of debates.

Precautionary Flood Protection in Europe

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From *Force Majeure* to solidarity

French Situation and Issues:
cat 'nat', *PPR*, and what more?

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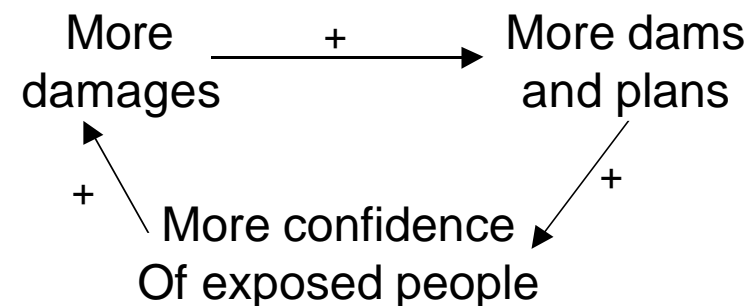
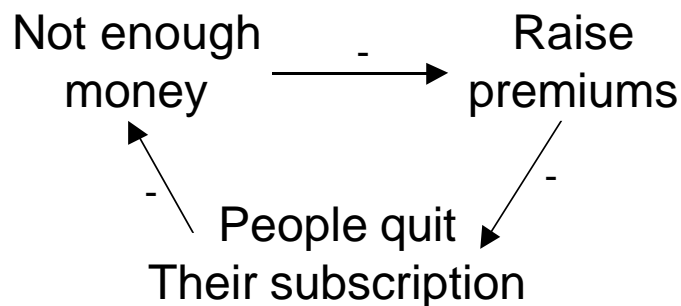
Unsustainability of increased damages

- **Does probability of floods increase? Not sure, but climatic change might make extreme events more violent**
- **Vulnerability sure increases with economic development close to water, while activities are better insured: growing losses**
- **Government tries to suppress floods through structural measures, and induces over-confidence and risk negation**
- **When catastrophes occur insurance coverage isn't granted, some people are ruined and government is blamed and asked for more protection.**

What can be done?

Liberal paradigm, public vs private, fails

- **On private or demand side: voluntary insurance, but**
 - Risk under-estimation leads to post-disaster reaction
 - No solidarity and no learning process. Individualistic ruin
 - Possibility of implosion of insurance system:
- **On public or supply side: tax funded infrastructure; but**
 - Pre-disaster policies lead to risk negation, illusion of protection
 - No solidarity and no learning process. Collective ruin
 - Possibility of explosion of the financing mechanism:



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a possible answer: common property & integrated management

- **Start from water as common property, i.e. as river basin where riparians form a community and develop solidarity**
- **Develop land use control and re-allocations to reduce vulnerability, and not only water planning to reduce risk**
- **Combine regulatory tools and economic incentives (e.g. tax on sealed surfaces and subsidies to vulnerability decrease)**
- **Create a super-fund through a tax on insurance premiums to cover damages, but with a learning mechanism**

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French system after the 1982 « cat 'nat ' » law (*catastrophes naturelles*)

- **A super fund is created within insurance companies through a tax on all housing and automobile premiums (today 12%)**
- **5 types of natural disasters are concerned, including earthquakes, floods, landslides, avalanches, cyclones**
- **If a flood occurs, mayors can request the state of cat 'nat ', and if Government accepts, people get reimbursed.**
- **Insurance companies have theoretically no right to raise the victims ' premiums (since the disaster remains exceptional)**
- **Counterpart is that all communes subject to one of the risks are supposed to have a map of risks and to make a zoning: red is unbuildable, blue is buildable under constraints**

Issues after 20 years: damages coverage

- **There is a real improvement of coverage compared to *force majeure*, of course**
- **But it is difficult to decide what is a real disaster, so that an increasing number of events is covered, sometimes repeatedly**
- **Thus the initial 6% tax on premiums had to be raised to 9%, and last year to 12%, this time to enable insurance companies to face long term consequences on houses of soil dessication in the long drought of early 1990 's**
- **It seems that the system is good on the short term but has perverse effects on the long run for lack of learning processes**

Issues after 20 years: prevention plans (PPR)

- **5000 communes are partly or completely concerned with flood risks, but only 3700 have yet completed their PPR and can use it to better manage their land use. Political weight of landownership**
- **Mayors are reluctant to spend money on knowledge which would ultimately limit development in their commune, all the more so that they can anticipate insurance coverage in case of flood**
- **This has brought some re-centralisation after the 1982-83 laws, as soon as 1987 (obligation to publicise risk maps) and later in 1994 (PER relabeled PPR, with increased role for Prefects)**
- **The permanent problem is that PPRs are prepared by experts who are water or hydraulic engineers, who try to make the best risk maps, while what is needed is vulnerability reduction by planners**

Beyond present limitations ?

- **No learning because solidarity is national, while prevention is local, with no reference to river basin issues**
- **The water law in project should create a new levy (on sealed surfaces) for the Agences de l'eau to help subsidise compensatory techniques and measures, but mostly for urban stormwater problems.**
- **Agences de l'eau should be involved, but they would need new profiles to move from water flows to land use control**
- **Ministry of Environment promotes co-ordination between concerned administrations at regional level**
- **And offers subsidies to local authorities to develop contractual and participatory approaches on a project management basis (*Projet Local de Prévention des Risques Naturels*)**
- **New forms of inter-communality, and river contracts, should help tackle floods prevention better, and develop a «culture of vulnerability reduction»**