

Integrated Natural Risk Management in the French Alps : Story of a territorial policy experimentation

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Vinca Devauchelle & Vincent Boudières, PARN



Pôle Alpin d'Etudes et de Recherche pour la Prévention des Risques Naturels



CONTEXT OF NATURAL RISKS IN THE FRENCH ALPS

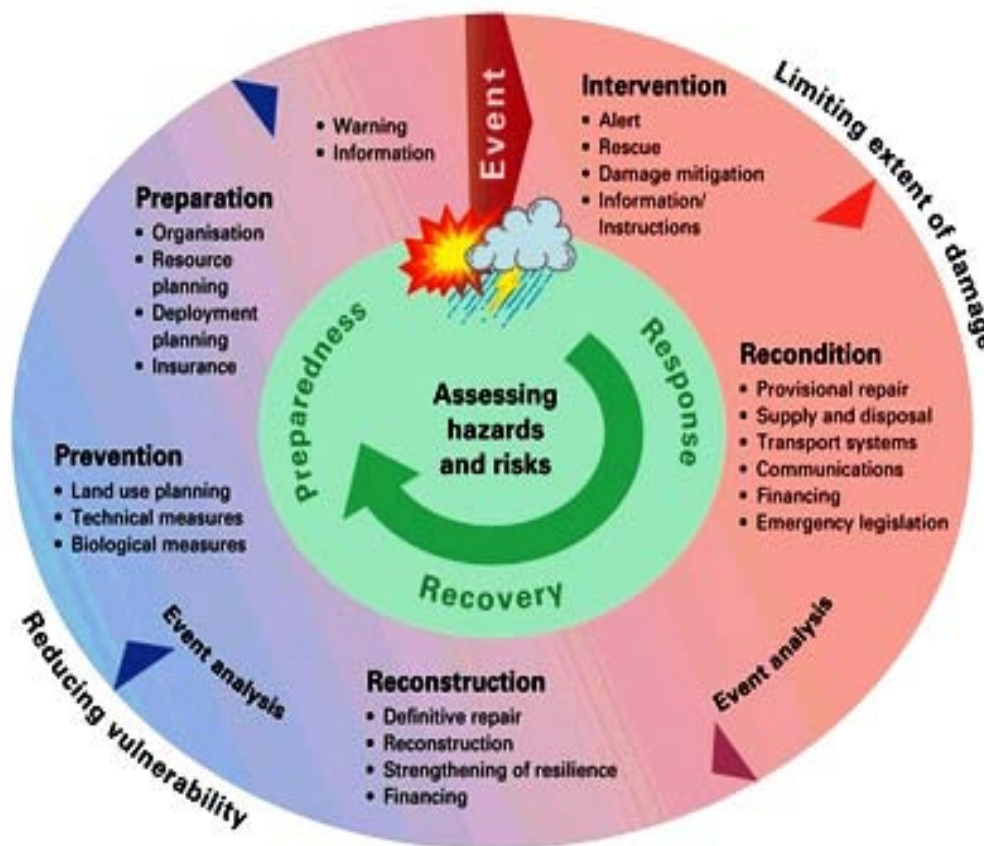
- **Environmental context:** climatic change and potential impacts on the hazards in term of intensity, and frequencies of their occurrence
 - **Socio-economic context:** economy mainly based on seasonal tourism; increase of population with urbanization mainly in the bottom of the valleys; need of mobility (secured network : road, railway, telecommunication, energy)
 - **Institutional and political context:** decentralization increases towards local risk management collectivities and increasing needs of management tools at the local scale
- **Increase of vulnerability with hazards in mutation**

 **NEED TO COMPLETE AND ADAPT NATURAL RISK MANAGEMENT**



INTEGRATED NATURAL RISK MANAGEMENT (GIRN)

- A systemic approach based on the cycle of integrated risk management



Source : Planat.ch



- **Issues of GIRN in the French Alps**

- ✓ Complete the **classical and segmented approach** (hazard/protection works) by a **new territorial approach** (vulnerability / organizational issues / project / risk culture)
- ✓ Overtake the **sectorial and punctual approaches** (crisis) in order to develop a **synergy** on the whole management process (prevention, alert, crisis, restoration) in the long term
- ✓ Highlight the **practices** of the territories and develop better **partnerships** and a better consideration of **risk upstream** of development projects
- **Encourage an economic and environmental development of the territory by a renewed and innovative way of handling natural hazards**
- **Improve the dynamics of governance linked to natural risks in relevant alpine territories based on local innovative project**



THE OPERATION « TEST SITES OF INTEGRATED NATURAL RISKS MANAGEMENT IN THE ALPS »

Funding, support and coordination of the operation

- **Institutional and funding context: the French “Comité de massif des Alpes” and the CIMA POIA 2007 – 2013 program :**
 - “Convention interrégional pour le massif des Alpes (CIMA)” : agreement supporting by **DATAR** for **ERDF (FEDER)** european funds
 - “Programme Opérationnel Interrégional des Alpes (POIA)” : program supporting by region **PACA** and region **Rhône-Alpes**
- **Operational context, the PARN :** established and coordinates the operation, animates intersites exchanges and supports the test sites with methodological expertise (methods, tools and specific practices)



Provence-Alpes-Côte d'Azur



Whish's the PARN :

- Association since 1988, the members are research organization on natural risk from Rhône-Alpes
- Actor of interface between science – decision making – technical operations

➤ **Make link between managers of natural risks in mountain regions and a scientific pole of excellence**



Operation aims

- Experiment, **innovate and encourage** new management uses in innovative integrated actions
- Set up a **network of actors and territories** on Integrated Natural Risk Management in mountains

Methodological approaches

- An approach based on the territories and their good governance: pilot sites and test sites
- A **methodological and technical** support made by the PARN for each pilot site
- Transversals exchanges at the interregional level: meetings, steering committee
- **Actions and actions plans determined by and with local actors:** elected representative, managers, association members, etc.
- A financial support (EU and regions) to animate and back the local management strategy





Spreading

- 1 massif: French alps
- 2 regions: RA et PACA,
- 3 departments (73, 38, 05),
- **4 pilots sites** with 4 different kind of local support collectivities
- **9 tests sites** (experimental actions)
- More than **130 municipalities** concerned



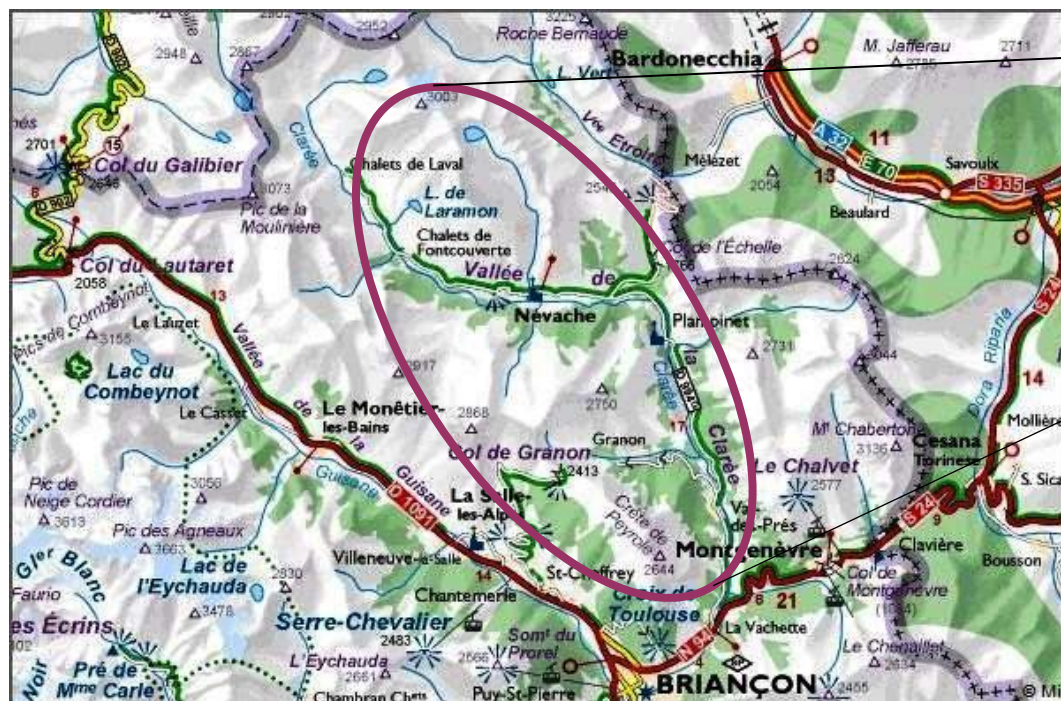
Themes implemented

- Reduction of the **organizational vulnerability by participatory approach**
- **Intermunicipality** preparation to crisis management
- **Risk culture, raising awareness** towards risks in mountain territories
- Back analysis and political-technical **dialogue**
- **Integrated approach** towards environmental issues(water – hazards – resources – climate - adaptation) and territorial development (hazards-tourism-environment)



PILOT SITE : PAYS DU GRAND BRIANÇONNAIS

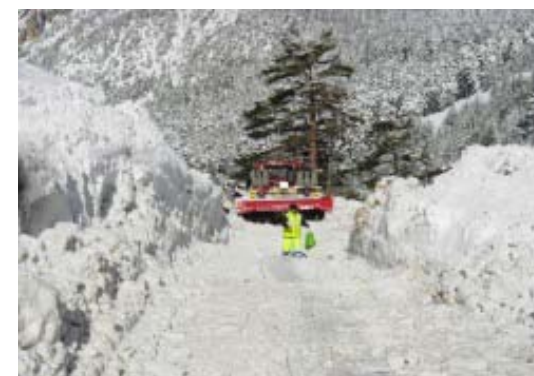
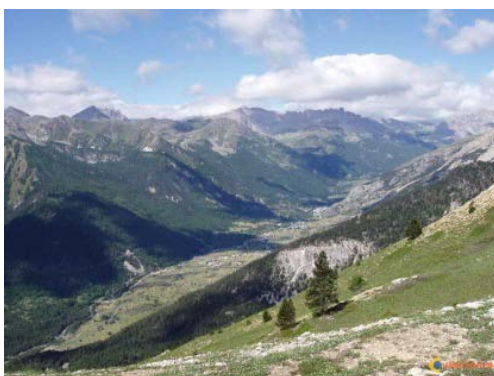
TEST SITE: VALLÉE DE LA CLARÉE





KEY ACTION : ORGANIZATION OF A PARTICIPATIVE WEEK ON NATURAL RISK MANAGEMENT

Context: valley cut off from the department due to **artificial or natural avalanche** release with **road interruption** (during 4 days in 2008)



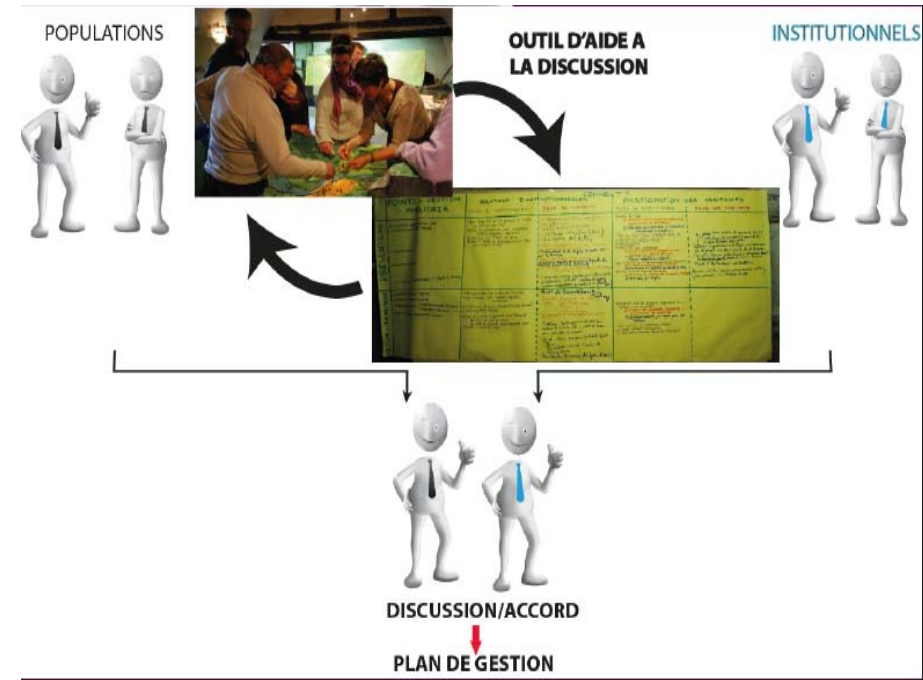
Aims

- Improve **risk culture** of local population and encourage a better acceptance of remoteness situation
- Work on **dialogue with local stakeholders** : local population, technical managers, economic actors and elected representative
- **Work on specific methodological approaches** : 3 D map, organizational diagnostic, etc.



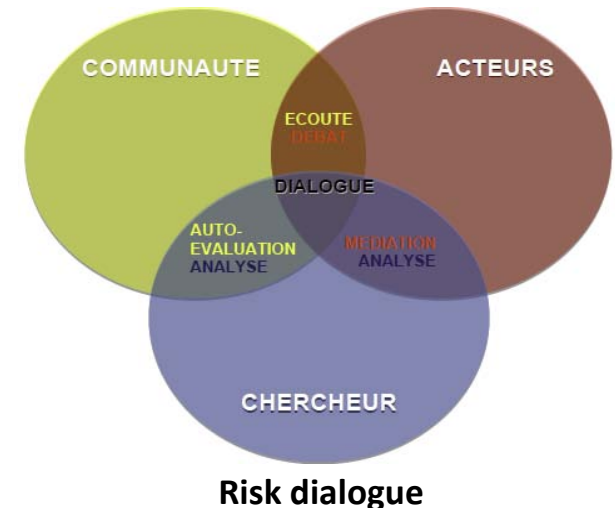
Approaches

- Reflection on the way of adapted the methodology and the themes titles
- **Scientific partnership** with universities
- **Political-technical dialogue** (state, departmental administration, municipality)
- Animation of **exchanges with the population** (residents, children and tourism professionals) based on a “maquette participative”
- Animation of **workshops and debates**, preparation of the « municipal emergency plan »



Impacts

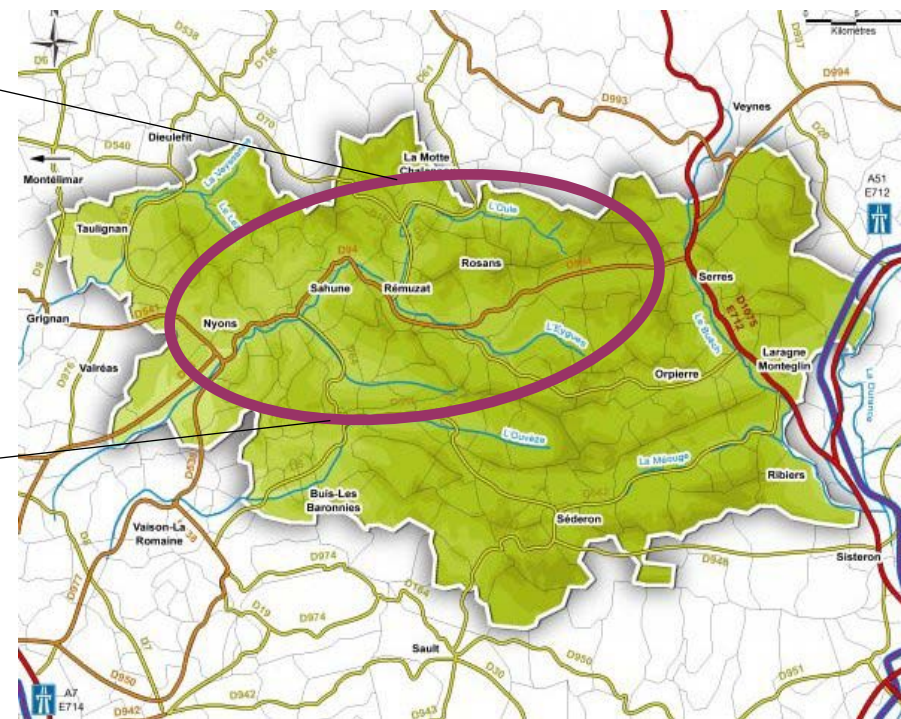
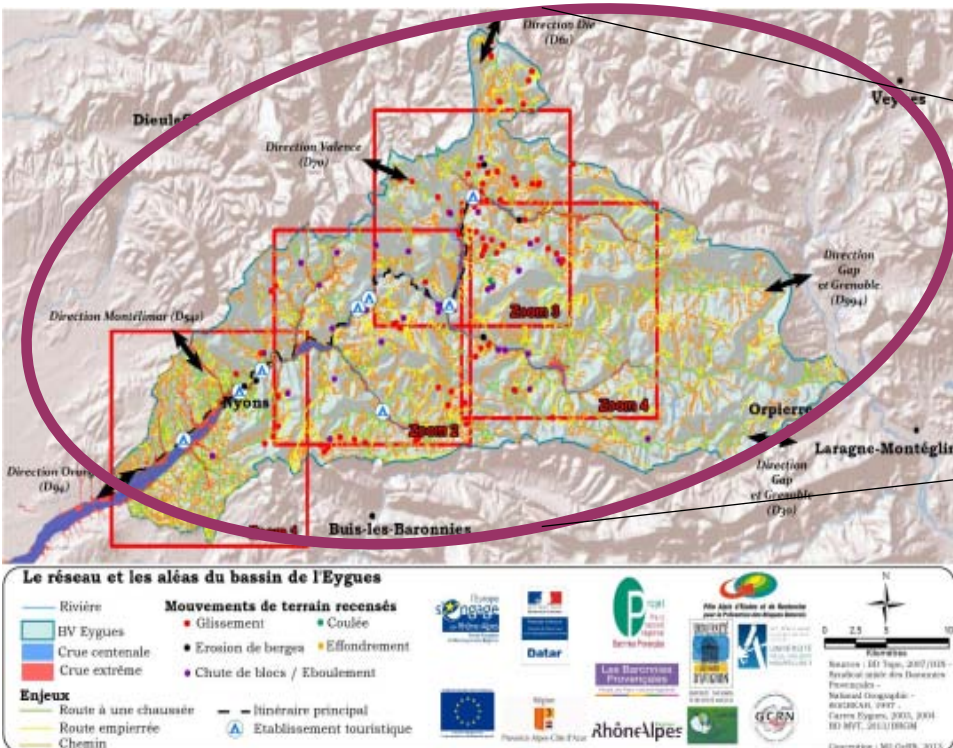
- **Renewal of local risk dialogue** with all stakeholders
- Transferable knowledge in local management tools
- Better **definition and understanding** of local needs
- An **important societal mobilization** on a complex and contentious topic





PILOT SITE: BARONNIES PROVENÇALES

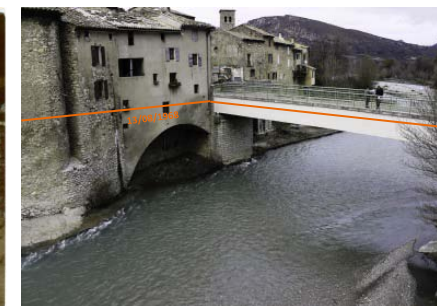
TEST SITE: L'ÉYGUES AMONT





KEY ACTION: VULNERABILITY DIAGNOSIS OF TOURIST EQUIPMENT AND ROAD NETWORK EXPOSED TO FLOODS AND RISES

Context: tourists installations, mostly camping, and road network, mainly at the bottom of the valley, are exposed to decennial **flood and rising risks** (also centennial for some of them)



Aims

- **Knowledge input on** : installations vulnerability and territory access in case of crises
- **Raising awareness of risks** for tourists installations' managers and owners
- **Submitting recommendations to** local actors into improving resilience of tourists activities

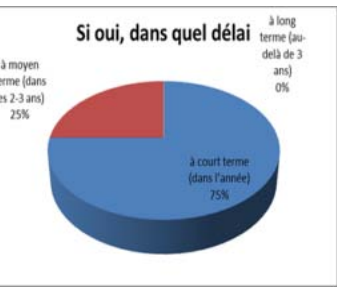


Approaches

- Sensitization of managers and elected representative to the process
- Scientific partnership with universities
- Data collection from institutional bodies, managers and the field (educational training)
- Presentation of findings at the actors involved

Impacts

- Local actor have well received **the technical propositions** on vulnerability reduction
- The results can **enriched** communal safety plans and campsite security
- This diagnosis is the **first step of a dialogue** between collectivities, managers and state services



Renseignements généraux
 Nom : Les cigales
 Adresse : Allée des platanes 26110 Sainte-Jalle
 Nom du gerant : Antoine TUARNES (Maire)
 Tel : 04 75 27 32 78
 Surface : 0,66 hectare
 Capacité d'accueil : 34 emplacements
 Dates d'ouverture : Du 28 avril au 30 septembre
 PPRi : Aucun

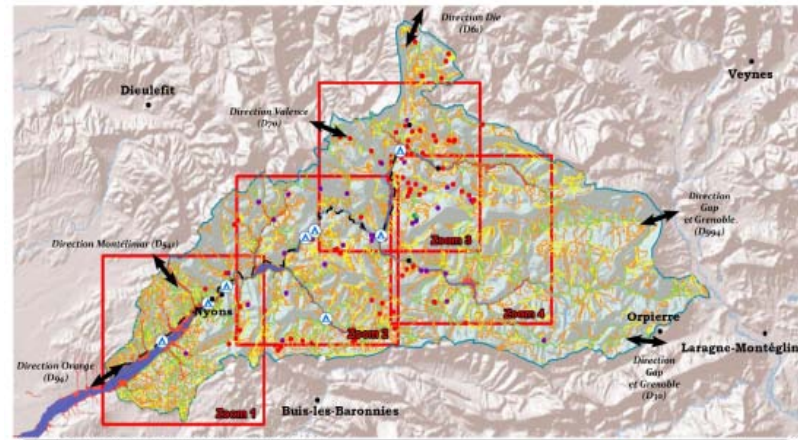


Scénarios	Q100		Quartème		
	Basse saison	0,22	0,3	0,3	0,3
	Moyenne saison	0,22	0,3	0,3	0,3
Haute saison	0,67	0,9	0,9	0,9	

Scénarios d'aléa	Q100		Quartème		
	Aléa	0,73	0,97	0,97	0,97
	Enjeux / Vulnérabilité	0,9	0,9	0,9	0,9
Capacité de réponse	0,76	0,52	0,52	0,52	



Commentaires :
 Le camping de Ste Jalle est situé à 87% dans la zone potentiellement inondable en cas de crue centennale et entièrement en cas de crue extrême. La faible indice d'aléa pour la Q100 s'explique par le fait qu'il n'y ait aucune source de pollution en amont et que le camping ne se situe pas dans le lit mineur et le lit moyen, ce qui favorise la réduction de l'indice de risque. Par ailleurs, l'indice est plus fort pour une crue extrême en haute saison. La faible capacité de réponse de cet établissement influe fortement sur l'indice de risque pour une crue extrême.



Le réseau et les aléas du bassin de l'Eygues

- Rivière
- BV Eygues
- Crue centennale
- Crue extrême

Mouvements de terrain recensés

- Glissement
- Erosion de berges
- Chute de blocs / Eboulement
- Coulée
- Effondrement

Enjeux

- Route à une chaussée
- Route empierrée
- Chemin
- Itinéraire principal
- Etablissement touristique

Logos for Rhône-Alpes, European Union, and other partners.



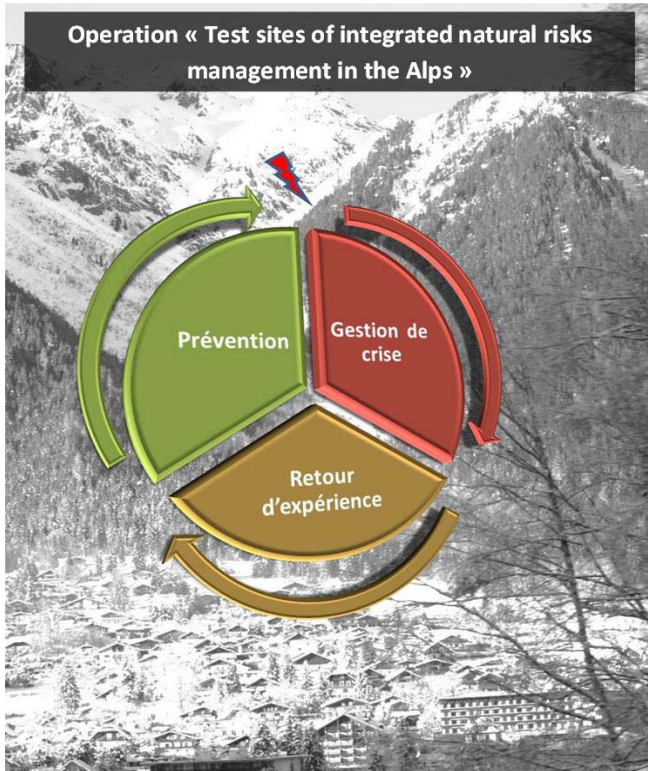
CONCLUSION

Global impacts

- Important to have a **physical incarnation** of integrated management in the territories
- Implementation of **innovative partnerships** and involvement of **new actors** in risk management process
- Development of **actions** with **high diversity** of thematic which have encouraged **territory innovation**
- **Setting up a network** of territorial, regional and interregional actors (different scale) on integrated natural risk management (GIRN)
- GIRN is **identified by territorial actors** as a reference for “ a good way to manage natural risks”

Limiting factors

- **Participatory approaches** are new in France (top-down vs. bottom-up)
- This kind of process need a high commitment and a lot of involvement
- **Need a high innovation process => research as a key actor**
- **Importance of operation capitalization for its spreading**



Thank you

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