

# Integrated management and participative approach (participative mapping 3D) on an avalanche prone territory :

How to develop a collective understanding of the vulnerability and of the organization of isolation

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- 3: Grand Briançonnais territory

## Introduction

Access to the village of Névache (Southern Alps, France) is exposed to avalanches. Artificial or natural release can cause isolation of the village (during 4 days in 2008).

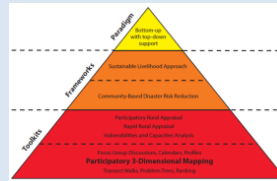
The decision to close the road, to release avalanche and after to manage isolation represent a major preoccupation for risk managers (local authorities). It's a concern for local and touristic population (350 inhabitants, 50% takes this road daily) or for socio-economic actors (lodging tourism).

To develop a shared local acceptance, based on a mutual understanding of issues and constraints, it is essential to experiment new integrated approach. This approach is based on the better interests of locals communities and implications of stakeholders.

## Scientific approach

The integrated risk approach recognizes people's participation as part of Disaster Reduction (Graph1).

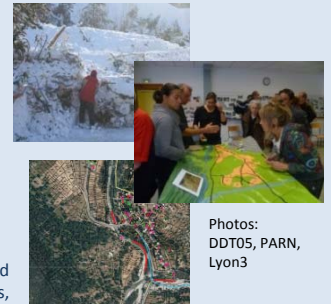
With local authorities, the local population participate at territory's resilience. For this purpose, their knowledges and organizational resources must be integrated into the local management system of risk.



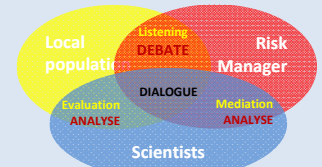
Graph1: Integrating tools of risk reduction (Gaillard)

Scientific approaches (human and social) can help local dialogue on risks, promote participation and development of a local culture of risk (Graph2).

Many tools exist: the consensus diagnostics, Participatory 3-dimensional and mapping GIS. These tools channel and catalyse dialogue between different actors .



Photos: DDT05, PARN, Lyon3



Graph2: Risk dialogue (Texier)

## Illustrations et Context



Geographic situation : PGBEQ



Illustrations: avalanche release, road close et road hivernal viability. Photos: Névache, DDT 05, PARN

## Methodology and process

Through participatory tools, the expression of needs, problems, but also solutions of different actors (managers, populations, economic actors) is facilitated.

After discussions, elements of the diagnostic are indicated on a 3D map, before to be transposed on GIS to feed local and conventional planning tools of risks reduction (prevention information, security planning, ...).



This methodology :  
 • Promotes local capabilities  
 • Participates at local resilience.

Illustrations participatory approach : organizational diagnostic, 3D map, GIS transcription. Photos: PARN, Lyon3

## Impacts

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

## Discussions

- ❖ Participatory approaches are new in France (top-down vs bottom-up)
- ❖ The effects of participation are difficult to sustain over time
- ❖ Citizen involvement side of risk managers is a gain on a preventive, but also in crisis management.

## References

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## Institutional partnership:

