



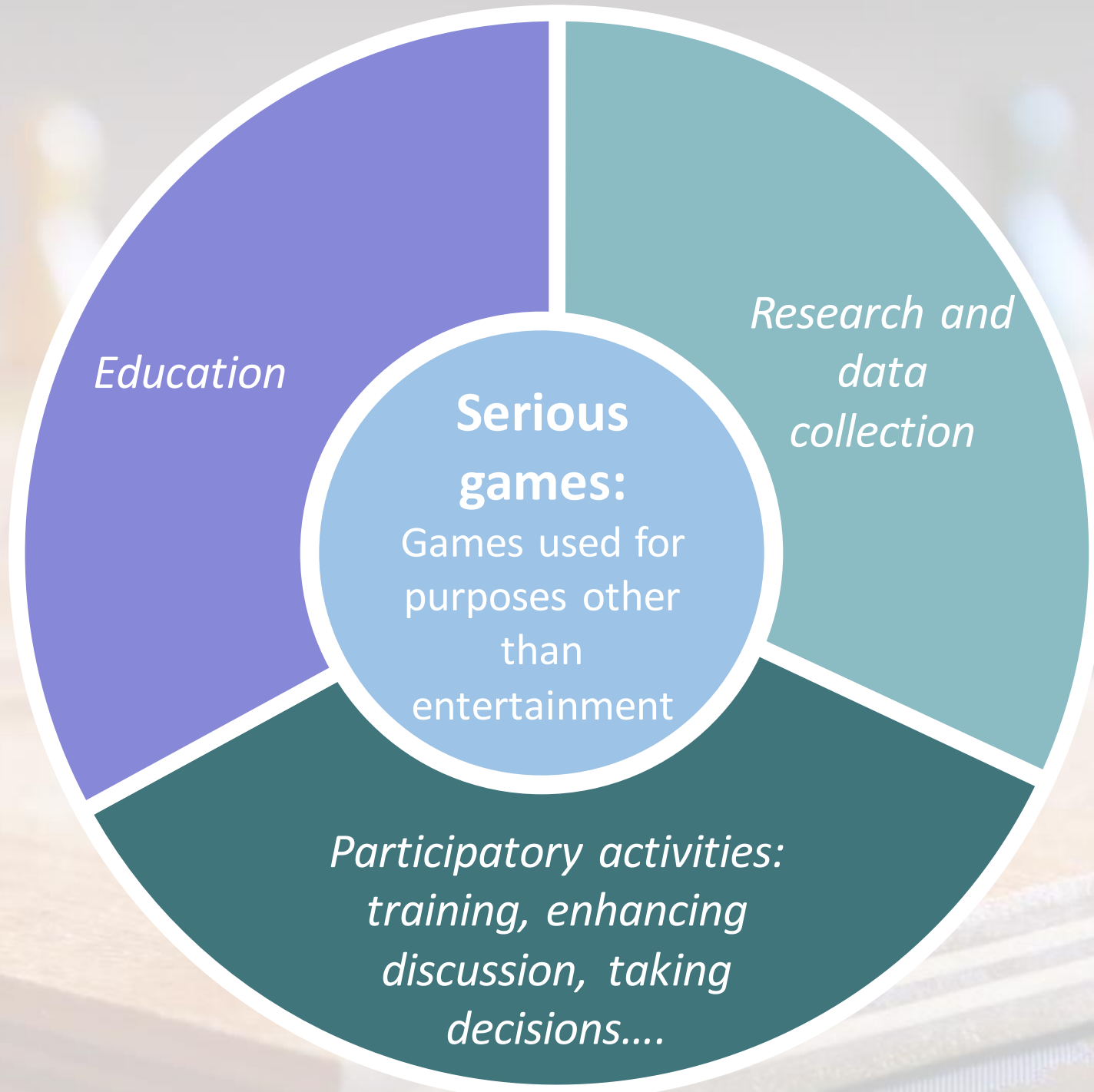
Serious gaming as a tool for involving local stakeholders in risk management



Norwegian
Meteorological
Institute

Ingrid Vigna

ingridv@met.no





**Serious
games for
participatory
activities**

Engaging the
stakeholders

Simulating the
reality

Facilitating the
discussion

Visualizing
long-term
dynamics

Providing a
"common
language"

Facilitating
and observing

Facilitating
mutual
understanding

The case:

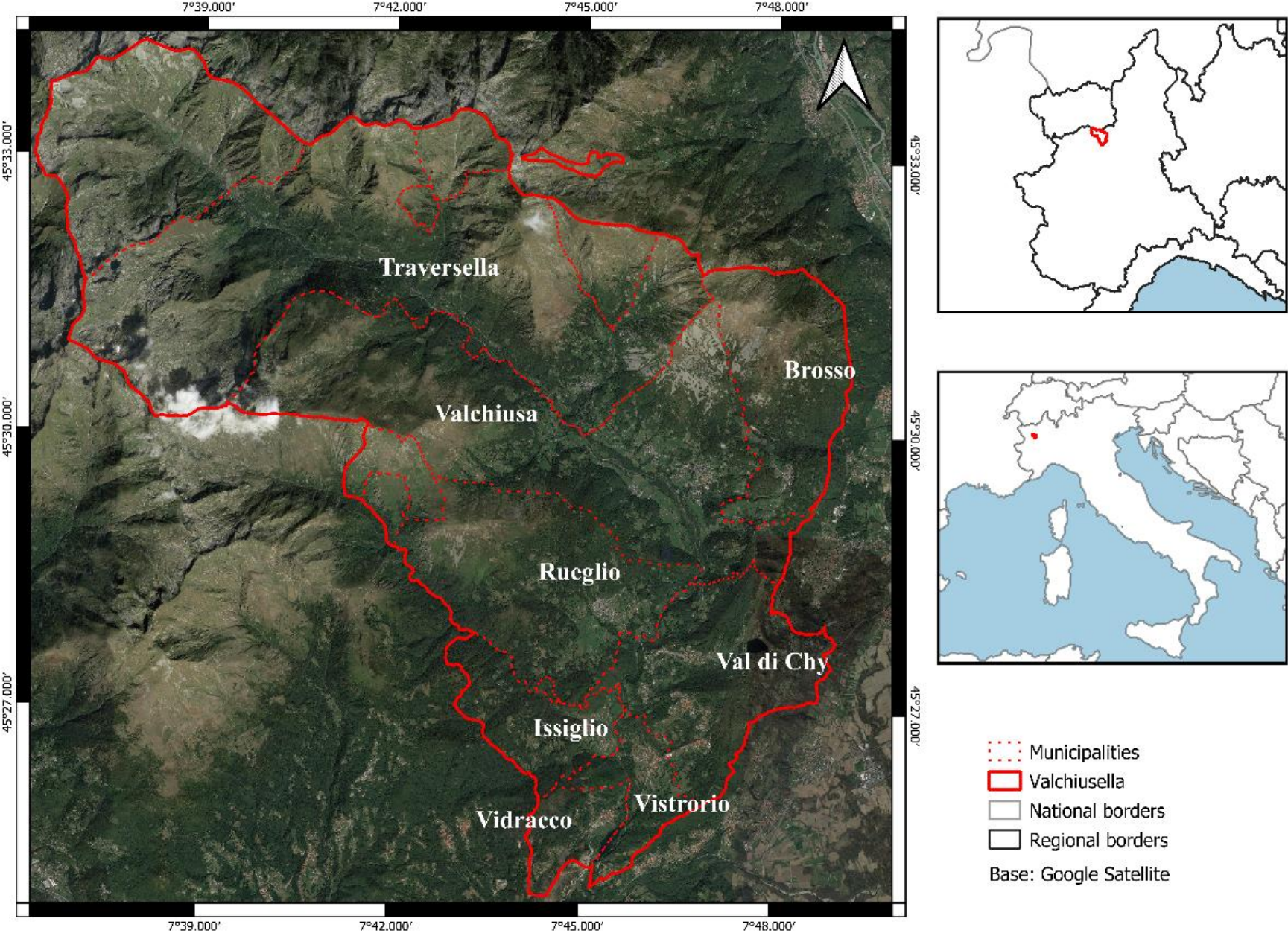
A Picit Jeu

A role-playing game about pasture and forest management for wildfire prevention



Valchiusella

Italian alpine valley characterized by rural abandonment



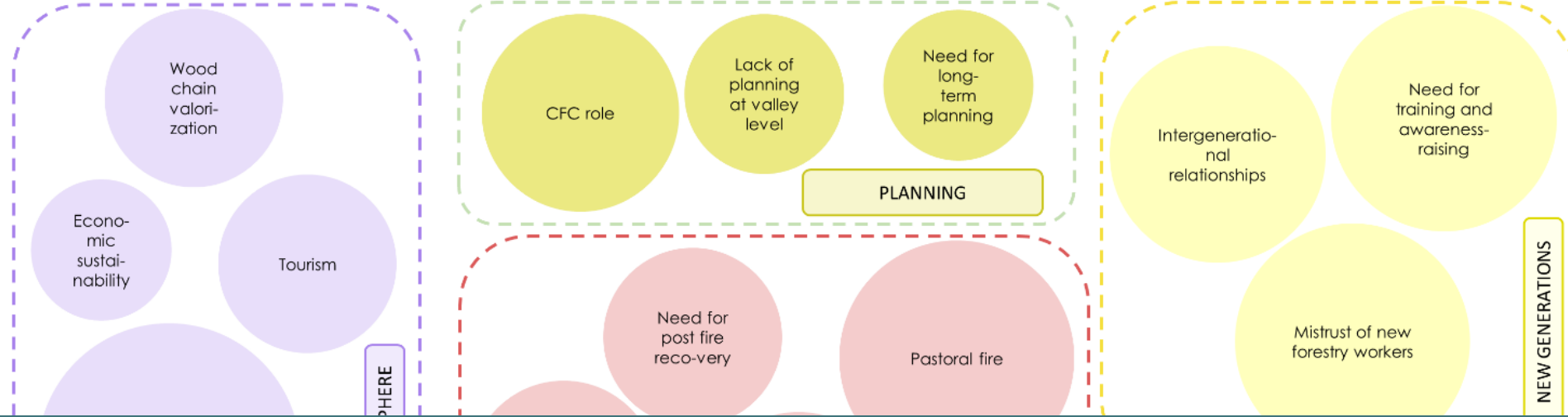
- Municipalities
 - ▭ Valchiusella
 - ▭ National borders
 - ▭ Regional borders
- Base: Google Satellite



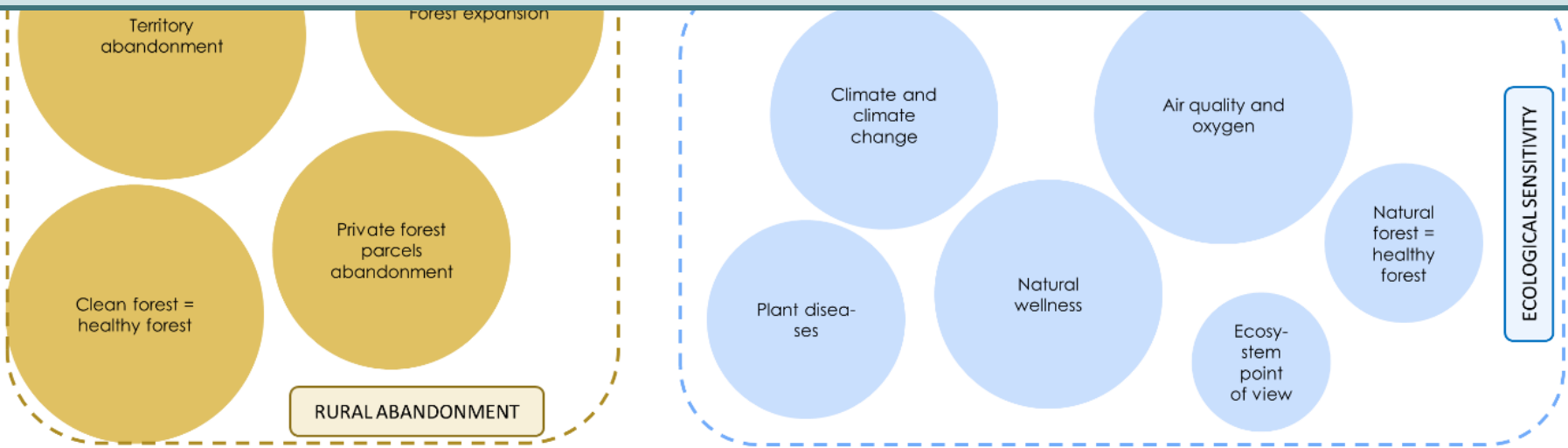
Game development process

Semi-structured interviews

- Analysis of the local community's perception about the interaction between ecosystem dynamics, human activities and wildfire regime



Leading question:
 How can we reduce wildfire risk by assuring the economic sustainability of forest and pasture management of public and private parcels?



Game development process

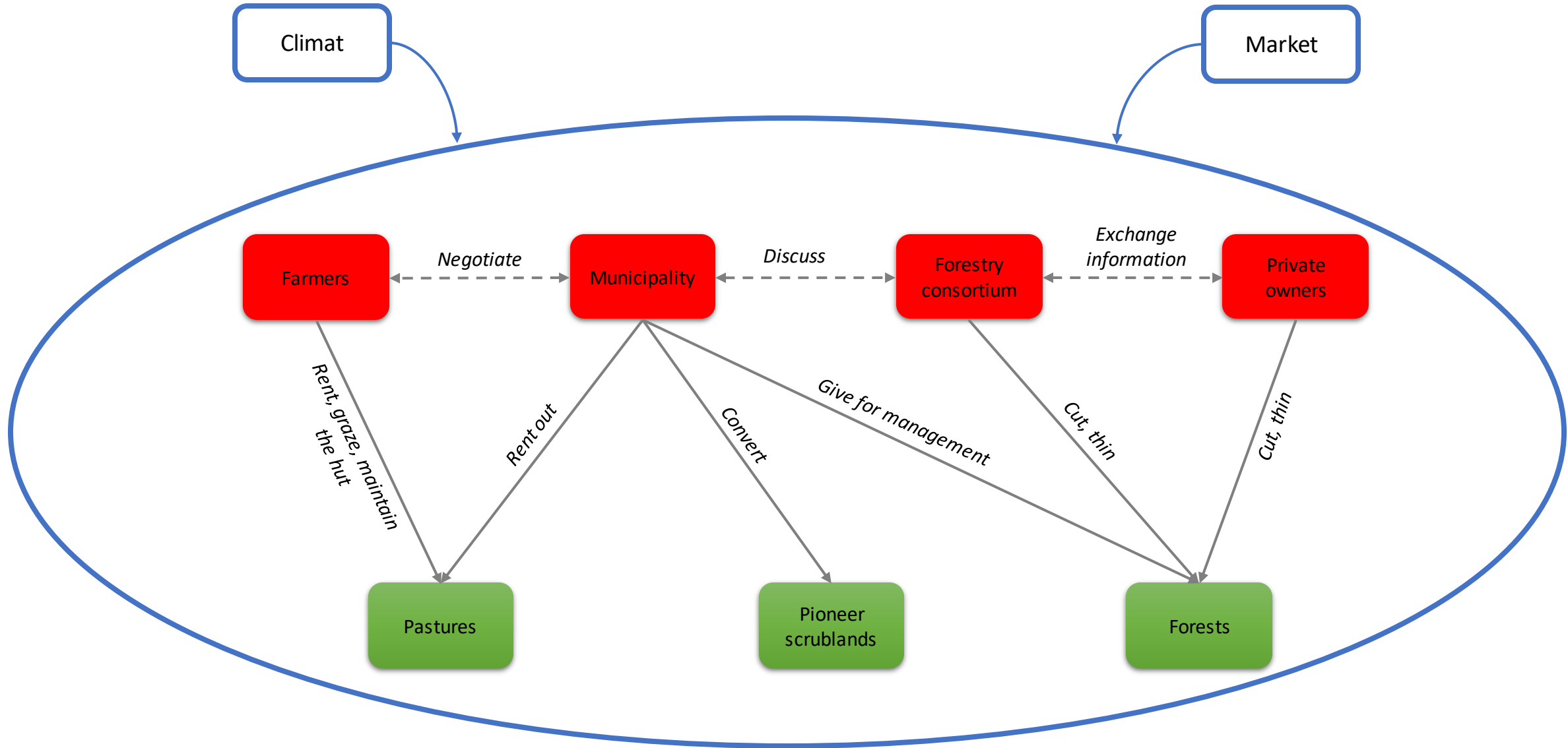
Semi-structured interviews

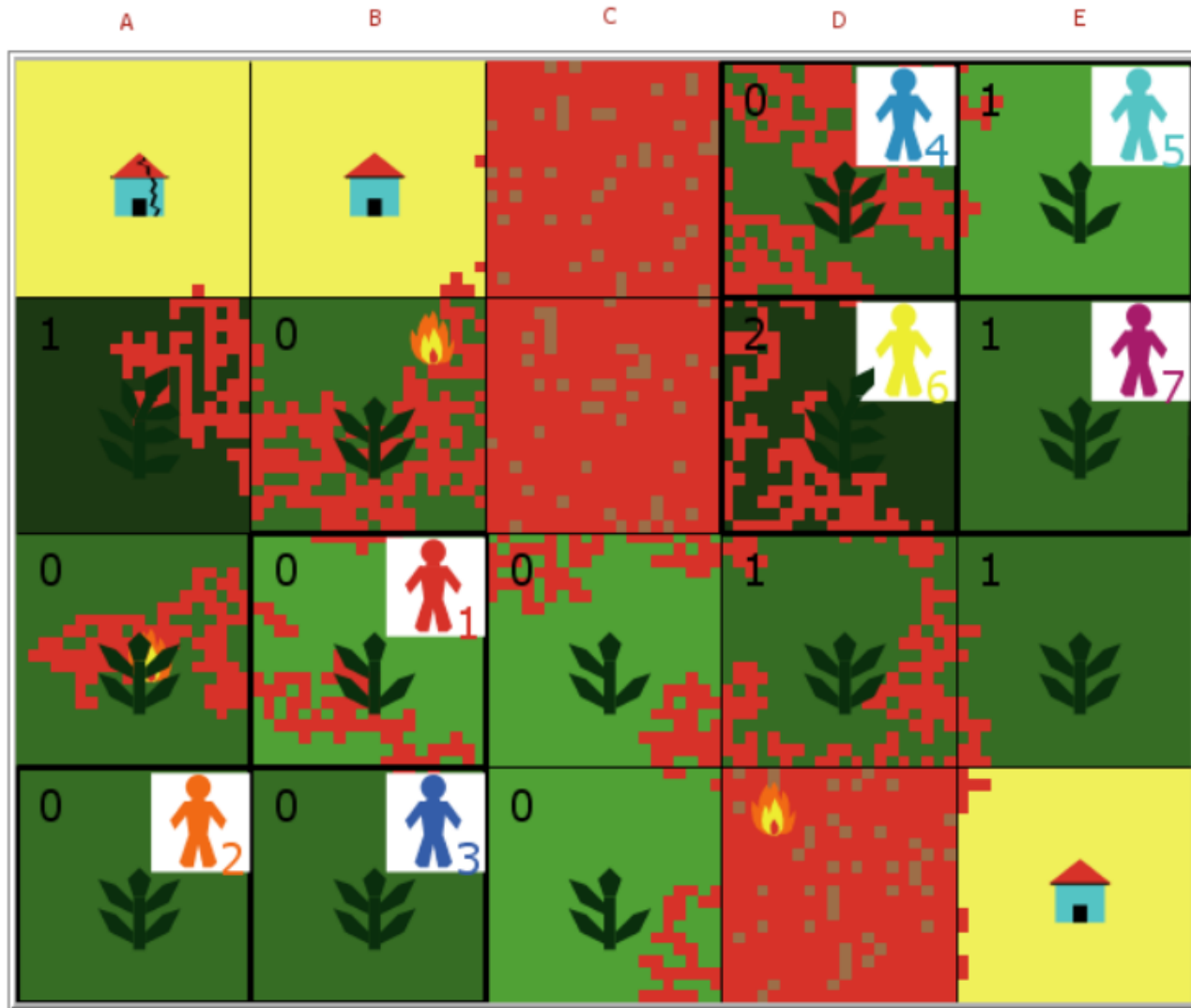
- Analysis of the local community's perception about the interaction between ecosystem dynamics, human activities and wildfire regime



Game design

- Construction of an Agent-Based Model representing local socio-ecological interactions
- Development of a role-playing game about territorial management, based on the ABM





FARMER

- Decide where to take your two herds to graze

PRIVATE OWNER

- Cut the forest for making money
- Pay a forestry company to perform thinning

MUNICIPAL ADMINISTRATOR

- Discuss with the forest technician the management of public forests

FOREST TECHNICIAN

- Discuss with the municipal administrator the management of public forests
- Use your technical knowledge
- Cut the forest for making money
- Pay a forestry company to perform thinning

Pay 70 \$ each round for the technical expenses of the forestry consortium

Game development process

Semi-structured interviews

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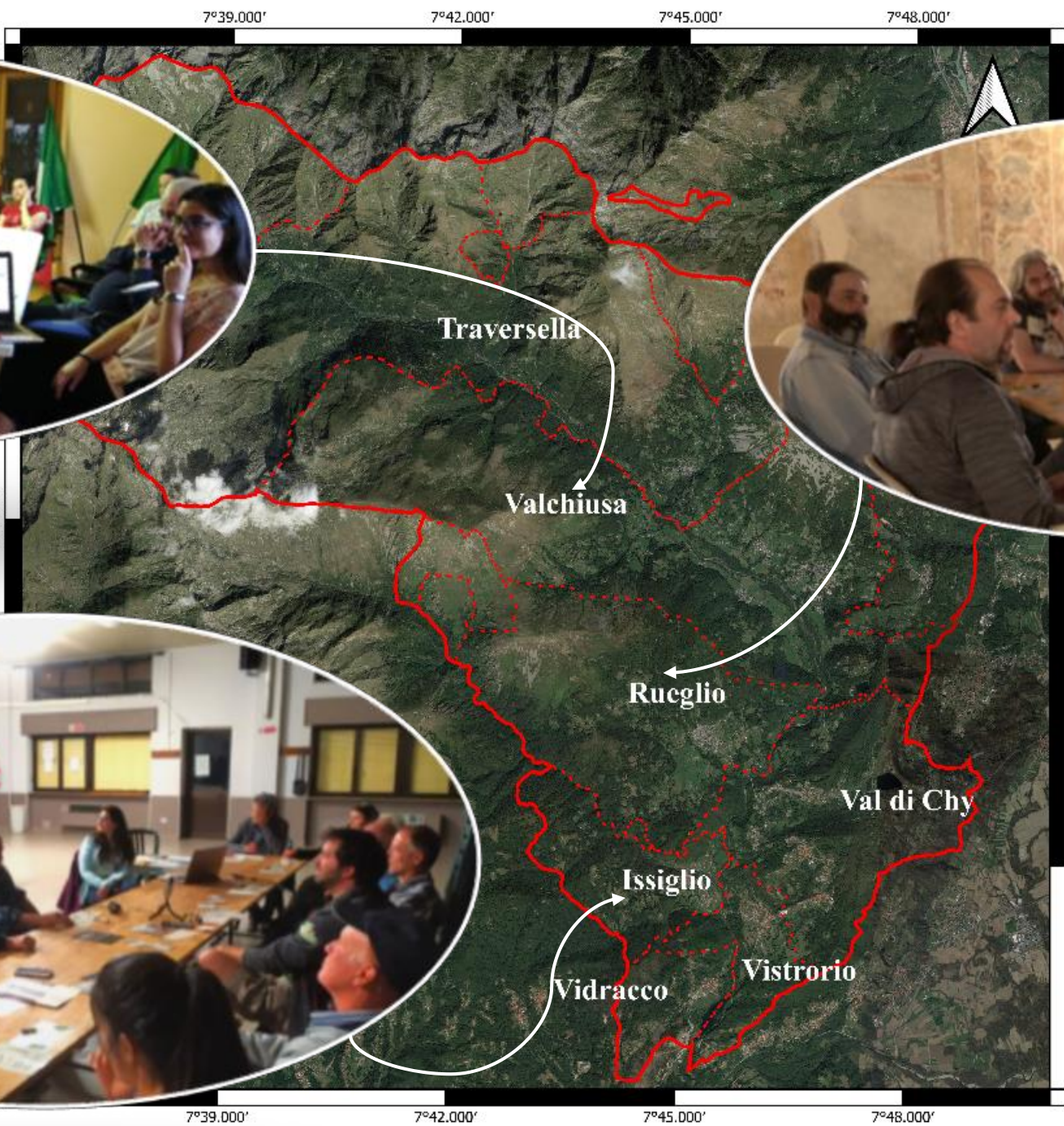
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Game sessions

- Organisation of focus groups involving local stakeholders of land management, using the game as a support for the discussion



Results

Mutual understanding

Social learning

Identification of focus points

Innovative proposals

Positive process triggering

Conclusions

Serious games as a
powerfull tool in risk management

Serious game as a
case specific tool

Serious game as a
resource-intense tool

A group of approximately seven people are seated around a long wooden conference table in a meeting room. They appear to be engaged in a discussion or presentation. In the background, a large screen displays a presentation with various charts and text. A smartphone is mounted on a small tripod on the table. The scene is brightly lit, and the overall atmosphere is professional and collaborative.

Thank you!