MurGame: Protect your village from debris flows!

Game ideas

MurGame Release 2.0 / August 2021
The Murgame is available online
www.murgame.ch

Contact for questions: murgame@geo7.ch
Get started with the tutorial.
Play a first round while receiving a broad overview

"Congratulations! You have been selected as a village planner for the development of a village. Let's get to work right away."

This is your building catalogue. Here you will find everything that can be built on this site.

Source for icons: www.flaticon.com
Docummented game variations:

1. Focus on single main game objective
   - Economic efficiency (1a)
   - Damage (1b)
   - Acceptance (1c)

2. Optimisation for several main game objectives
   - Economic efficiency, damage, acceptance

3. Budget limitation

4. Focus on themes
   - Types of measures (4a)
   - Bridge (4b)

→ Suggestion: During tutorials you can start a competition. The team with the best solution wins.
Goal: The village, incl. its protection measures, is optimally designed in terms of economic efficiency.

Framework conditions:
The objects can be chosen freely. Object numbers, costs and inhabitants are not additionally limited.

Results:
What's the level of the achieved economic efficiency?
But: what about damage and acceptance?
Goal: The village incl. its protection measures is optimally designed with regard to the remaining damage.

Framework conditions:
The objects can be chosen freely. Object numbers, costs and inhabitants are not additionally limited.

Results:
What's the remaining extent of damage??
But: what about economic efficiency and acceptance?

Source for icons: www.flaticon.com
Goal: The village incl. its protection measures is optimally designed in terms of acceptance.

Framework conditions:
The objects can be chosen freely. Object numbers, costs and inhabitants are not additionally limited.

Results:
What's the level of acceptance among the population?
But: What about economic efficiency and damage?
Goal: The village incl. its protection measures is optimally designed in terms of acceptance, economic efficiency and remaining damage.

Framework conditions:
The objects can be chosen freely. Object numbers, costs and inhabitants are not additionally limited.

Results:
What's the range of the achieved values?
What compromises had to be made (in order to keep the balance?)
Goal: Find the ideal balance between acceptance, economic efficiency and remaining damage with a budget of 15 million Swiss Francs for your buildings, housing units and protective measures.

Framework conditions:

**Budget:** 15 million Swiss Francs

Free choice of objects. No additional limitation on object numbers, costs or inhabitants.

Results: What's the range of the achieved values?

What compromises had to be made (in order to keep the balance?)
Goal: The village is only protected with spatial planning and organisational measures.

Framework conditions:
Organisational measures and spatial planning (i.e. relocating buildings / no buildings on certain plots) only.
Free choice of all other objects. No additional limitation on costs or inhabitants.

Result: Is it possible to ensure a satisfying amount of protection?
Goal: Identify the different effects of small and large bridges during the event of a debris flow.

Framework conditions:
Phase 1: built a small bridge.
Phase 2: built a larger bridge.

All other objects can be chosen freely. Number, inhabitants and costs are not additionally limited.

Result: Is it possible to ensure a satisfying amount of protection with a small bridge over the stream?
MurGame: thank you very much

The sponsors:

The developers: