KAZAN: Will you survive the next geodisaster? An educational game for raising awareness about geohazards and risk reduction strategies

Sophie Mossoux, Audray Delcamp, Sam Poppe, and Matthieu Kervyn
Vrjie Universiteit Brussel, Department of Geography, Brussels, Belgium (makervyn@vub.ac.be)

Natural disasters remain too often presented in the media as the results from extreme natural phenomena affecting helpless people. School students and stakeholders, especially in developing countries, have a limited awareness of the different components of disasters and of the complementary strategies existing to mitigate their impacts.

Using the specific example of the Ngazidja Island (Comoros), we developed and tested a new board game aiming at raising awareness about geohazards (i.e. earthquake, tsunami, lava flow, volcanic ash fall). This game highlights the various and spatially-variable geohazard impacts on the exposed population, the key role played by livelihood strategies and the access to natural resources in controlling long term impacts, and the capacity of a community to act in reducing its vulnerability to natural hazards. The target public of this game are 1. secondary school students, 2. scientists and stakeholders involved to some degree in risk management activities, and 3. people exposed to these hazards. For the first group, the aim is to allow them to better interpret the disaster to which they are confronted in the media, whereas for the second group, the objective is to generate discussion about the efficiency and complementarity of contrasted risk management strategies. The objective for the last group is to help them to understand the hazard to which they are confronted in order to be better prepared. In this contribution, we will present the game board and the implemented rules.

This game was tested with several groups of secondary school students in Belgium and with geologists and risk managers in Tanzania and in the Comores. On the basis of the analysis of the game strategies developed by the players, their reactions during the game and their answers to a short questionnaire, we analyse the main learning outcomes that are conveyed by this game. We compare these outcomes with key elements of the risk management, focusing on geohazards in developing countries.

Kazan game appears as an effective and activating learning tool to transfer important concepts and generate debate about natural disasters, focusing on the spatial competition for natural resources and the control of household's livelihood on their vulnerability to hazards.