



‘Hazagora: Will you survive the next disaster?’ – Lessons learned from the use of a serious game on natural hazards risk in developing countries regularly facing disasters

Caroline Michellier (1), Yves Ngunzi Kahashi (2), Sophie Mossoux (3), Matthieu Kervyn (3), and François Kervyn (1)

(1) Royal Museum for Central Africa, Department of Earth sciences, Natural Hazards Service, Belgium (caroline.michellier@africamuseum.be), (2) Catholic Agency for Overseas Development, Democratic Republic of Congo, (3) Vrije Universiteit Brussel, Department of Geography, Belgium

Hazagora is an educational board game aimed at raising awareness about natural hazards and disaster risk reduction strategies. During the game, the players have to develop communities with contrasted livelihoods on an island regularly exposed to a range of natural hazards (lava flow, tephra fall, flood, landslide and earthquake). Each player aims at fulfilling the basic needs of its community (housing, food and drink) by accessing natural resources while strengthening their resilience to disaster with preparedness measures. The game is mainly targeting secondary school students from developing countries facing such hazards. It aims at inducing a better understanding and adapted reactions to the natural hazards and disasters they can face in their daily life. It was also played with scientists and stakeholders involved in risk management activities, with the objective to generate discussions about risk management strategies. The learning outcome of the game was tested using a survey questionnaire completed by each player before and after the game session. Hazagora game appears to positively enhance the players’ insights into processes involved in disasters, while being fun to play and generating the active engagement of the player. As such, the game is an efficient fun learning tool to introduce participants to the concepts of natural hazards and disasters, and to generate discussion.

In this contribution, we specifically report on the implementation of Hazagora in about 50 secondary schools of Goma (Democratic Republic of Congo). After an intensive training of 50 geography teachers, the game was made available for their schools. We present here the perceptions of the geography teachers regarding this game, as a tool for both reinforcing basic geographical concepts and raising natural hazards risk awareness. We compare the results obtain in Goma (DRC) with the use of the game in various other contexts over the past 5 years. Indeed, based on the feedback from secondary schools’ users from different countries, advantages and limitations of this serious game to communicate about natural hazard risk have been highlighted, identifying relevant lessons for the development and the adaptation of such a tool according to the targeted public and the learning outcome.