



Disasters in Popular Cultures

Giovanni Gugg, Elisabetta Dall'Ò, Domenica Borriello (Eds.)

The Virunga volcanoes in the Eastern of the Democratic Republic of the Congo, A popular perception: Myth or reality?

Patrick Habakaramo¹, Gracia Mutalegwa², Justin Kahuranyi³, Katcho Karume⁴

Abstract

Socio-cultural relations and natural hazards are one of the complex aspects to understand and explain, although one may question their historical and geographical conditions. Some parts of the world suffer an high vulnerability caused by natural phenomena such as erosions, volcanic eruptions, landslides, bush fires, and so on. The Democratic Republic of Congo (DRC) is not spared from all these phenomena. In its Eastern part, there are important volcanic mountain ranges called Virunga, which means mountains or “Kirunga” or “Ikirunga” in local languages spoken respectively by the Kumu, Hutu and Tutsi peoples of North Kivu. These mountain ranges contain several volcanoes, only two of which are active today, namely Nyiragongo and Nyamulagira. The perception of such volcanic phenomena by local populations has ever been shared and sometimes contradictory. Anthropological knowledge about these volcanoes has never been documented, however, for some people, volcanoes represent a deity, a myth, an evil spirit, a devil or a demon. Some inhabitants living the the volcanoes area believe that just inside the crater, before the eruption, lives a large animal requiring blood sacrifices using its adepts which are similar to large crickets and bats; animals that only kill at night by draining the victim’s blood. Since the prohibition to leave at night their homes during the pre-eruptive period. The inhabitants indicate that these animals shine at night, similarly to volcanic projectiles. About 18 km from these volcanoes is the city of Goma. The origin of this name comes from the volcanic detonations (roars) felt by the populations living near volcanoes. People call these detonations “Ngoma” in the local language which means “drum”. These populations believed that inside the crater would be a king for whom the drum had to be beaten at certain times. When the Belgian settlers arrived, they asked the indigenous peoples about the names of the villages around the volcanoes. As far as they didn’t understand the native language, the lands’ names took the expressions indicating volcanic detonations (Ngoma). This fact allowed the settlers to call the city around Lake Kivu, Goma, in reference to Ngoma. Since volcanoes are a bad and evil spirit, every year the customary authorities had to sacrifice a virgin girl by throwing her into the crater, or killing a cow and offer beer to calm the ancestors and ask them not to fire the villages. The volcanic eruption was then perceived as a punishment that the ancestors inflicted on the community for an attitude not in accordance with their will or a way to drive out the enemy who invaded the community. Thus, the last eruption of 2002 of the Nyiragongo volcano, which destroyed 80% of the economy of the city of Goma, is generally perceived as a divine or ancestral opposition to the various rebellions that invaded the eastern part of the RD of Congo. Nowadays, a significant number of people still believe that the volcano eruption is a punishment that God has put by the side of the Congolese man, while the intellectual conceives it as a natural phenomenon that needs to be monitored through modern equipment. Others believe that volcanoes represent a source of opportunities for both the public treasury and the community through tourism, soil fertility and/or availability of building materials.

¹ Observatoire Volcanologique de Goma, RD. Congo, e-mail : patrickhabak@yahoo.fr.

² Observatoire Volcanologique de Goma, RD. Congo, e-mail: graciambutalegwa2013@gmail.com.

³ Observatoire Volcanologique de Goma, RD. Congo, e-mail : kabajuna10@gmail.com;

⁴ Observatoire Volcanologique de Goma, RD. Congo / Université Evangélique en Afrique, Faculté des Sciences Agronomiques et Environnement, Bukavu, D.R. Congo, e-mail : katcho@yahoo.com.



Disasters in Popular Cultures

Giovanni Gugg, Elisabetta Dall'Ò, Domenica Borriello (Eds.)

This work consists in documenting the popular oral histories of people living around volcanoes on disasters such as volcanism in the Virunga region of eastern DRC based on past and present anthropological knowledge.

Keywords: Virunga Volcanoes, Nyiragongo, Nyamulagira, natural hazard, volcanic eruptions.

Works cited

Hamaguchi, H., Zana, N., 1983, "Introduction to Volcanoes Nyiragongo and Nyamuragira". In: Hamaguchi, H. (Ed.), *Volcanoes Nyiragongo and Nyamuragira: Geophysical Aspects*, Faculty of Science, Tohoku University, Sendai, Japan, pp. 1-6.

Hamaguchi, H. & Zana, N., 1990, "A Great Circle Distribution of Four Active Hotspots: Evidence for DeepMantle Plumes; Tohoku", *Geophys. Journ. (Sci. Rep. Tohoku Univ., Ser. 5)*, 33 (3-4): 251-262.

Mavonga, T., Kavotha, K.S., Lukaya, N., Etoy, O. & Durieux, J., 2006, "Seismic activity prior to the May 8, 2004 eruption of volcano Nyamulagira, Western Rift Valley of Africa", *Journal of Volcanology and Geothermal Research*, 158: 355-360.

Mavonga, T., Kavotha, K.S., Lukaya, N., Etoy, O., Wafula, M., Rusangiza, K.B. & Jacques, D., 2010, "Some aspect of seismicity prior to the 27 November 2006 eruption of Nyamuragira Volcano and its implication for Volcano monitoring and risk mitigation in the Virunga area", *Western Rift Valley of Africa. Journal of African Earth Sciences*, 58 (5): 829-832.

Rusangiza B.K., Mavonga, T., & Subira M.J., 2017, "Analysis of earthquakes swarm and volcanic tremor associated with sismo-volcanic activity at volcano Nyamulagira, Virunga region", *Geo-Eco-Trop.*, 2017, 41, 2, n.s.: 219-232.

Rusangiza, B.K., Mavonga, T., Lesage, P., Kavotha, K.S., Wafula, M., Lukaya, N. & Ciza, A., 2012, "About swarms of long-period earthquakes of volcano Nyamuragira of the Virunga Region, Western Rift Valley of Africa (D.R. of Congo)", *Geographica Pannonica*, 16 (1): 10-17.

Smets, B., Wauthier, C., D'Oreye, N., 2010, "A new map of the lava flow field of Nyamulagira (D.R. Congo) from satellite imagery", *Journal of African Earth Sciences*, 58 (5): 778-796.

Tedesco, D., Vaselli, O., Papale, P., Carn, S.A., Voltaggio, M., Sawyer, G.M., Durieux, J., Kasereka, M., Tassi, F., 2007, "January 2002 volcano tectonic eruption of Nyiragongo volcano, Democratic Republic of Congo". *Journal of Geophysical Research*, 112, B09202.