

## **Paper volcanoes Lab: a way to engage early childhood and primary school children on Earth Science**

The pilot project will allow teachers and educators of children of pre-primary and primary education based in developing countries of Eastern Africa help familiarize with Earth Science through engaging object play Paper Volcanoes Laboratory (PVL) program. The IUGG will help to support the priority area Geoscience education and outreach by fostering local young researchers and educators through a science community approach.

The project aims:

- to support the preschoolers and primary school age children who live in countries with volcanic activity to familiarize with the wonders and the associated risks of volcanoes by using an object play approach as developed in the Paper Volcanoes toolkit.
- to engage young children - researchers, teachers from developing countries, and senior researchers and academics from international institutions to foster collaborative work.
- to increase educators' scientific content knowledge and pedagogical skills by providing a set of learning activities that are highly engaging and easy to perform through the Paper Volcanoes toolkit
- to test and evaluate the Paper Volcanoes tool kit in diverse contexts where the relationship between communities and volcanoes has cultural significance
- to continue to enrich content by linking it to cultural background of the children and focusing on identity and inclusion and sharing experience and knowledge in a holistic approach
- to prepare earth science educational materials based on the school curriculum in Kenya and see how it can be scaled up towards other countries in Africa and other developing nations.