



Cities on Volcanoes 9  
November 20-25, 2016  
Puerto Varas, Chile

*'Understanding volcanoes and society: the key for risk mitigation'*



## **The Huayruro educational program: increasing risk perception and knowledge amongst children living around the Huaynaputina volcano, Peru.**

**L. Macedo <sup>1</sup>, L. Thouret <sup>2</sup>, R. Gusset <sup>3</sup>, B. Carrasco <sup>1</sup>, G.O. Callo Paye <sup>4</sup>, L. Sardón <sup>5</sup>**

<sup>1</sup>Obs. Volcanológico INGEMMET, Arequipa, Perú

<sup>2</sup>LMV UMR6524 CNRS, OPGC and IRD, Clermont-Fd, Francia

<sup>3</sup>Univ. de La Réunion, IPGP UMR7154 CNRS, Francia

<sup>4</sup>Inst. educativa Francisco Bolognesi, Omate, Perú

<sup>5</sup>Inst. educativa V. R. Haya de la Torre, Quinistaquillas, Perú

**Key words:** Huaynaputina, Huayruro project, pupils, risk perception, education

The Huaynaputina volcano produced the largest eruption (VEI6) in Latin America in AD 1600. This event caused the death of approximately 1500 people and buried at least 11 villages located within 20 km around the volcano (Navarro, 1994). With the aim to assess the potential impacts of a large eruption, the Volcano Observatory of INGEMMET launched the multidisciplinary 'Huayruro' project for the next five years. Peruvian and foreign geoscientists and social scientists are working together with local people, teachers and children in the Moquegua region.

In 2015, the training program on volcanic risk started with 75 pupils 7-12 years old from two villages affected by the AD1600 eruption. Firstly, we examined the children knowledge on volcanism, hazards and risk. This investigation required collective brainstorming and recreational activities on vocabulary associated to volcanic eruptions, and individual drawings applied to volcanoes. Results show that although volcanology is not an academic course, pupils' understanding of volcanoes and their activity is acceptable. Although stereotypes or confusions are inevitable, the children perceive reasonably well the consequences of the Huaynaputina eruption. Secondly, we will involve pupils together with teachers and scientists using simple experiments, sketches, visits to settlements buried by tephra, and interviews with adults, hence promoting exchanges between generations. This aims to untangle how the children's perception of their impacted environment has been transmitted by families or taught in classrooms. Such a training program will match the instructions of the Peruvian Ministry of Education to be applied in January 2017. The final goal is to enable children to become aware of land use planning and disaster risk management, thereby contributing to educate the older generations. The children will participate in the design of a future centre for sensitization and education (*Museo de sitio*) that will receive local and foreign visitors.