Preventive work in rural communities surrounding the Villarrica volcano, Chile

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Villarrica volcano is located in the Southern Volcanic Zone of the Andes (39.5°S), being considered as the Chilean's most active volcano, with up to 49 historical eruptions since 1558. During its latest eruptions, Villarrica has emitted lava flows, pyroclastic rocks and volcanic gases, increasing the potential to generate lahars (Clavero and Moreno, 1998). Historical lahars have had harmful effects on the neighboring communities, with loss of human lives, damages on the road infrastructure, disruption in basic services, and economic losses. The Chilean Emergency Office (ONEMI) developed preventive work in order to raise people's awareness of volcanic risks, work that was done under the Microzoning Risk Program with Community Participation based on the AIDEP and ACCEDER methodologies, the former related to risks appraisal and the latter bounded to emergency plans. Those activities were carried out with the municipalities of Villarrica and Pucón and scientifically supported by the Southern Andes Volcanic Observatory. Since June 2014, that preventive work was intensified; even more an eruption scenario was simulated in December 2014. This training was extremely useful as was seen on the successful evacuation that took part during the eruption on March 3, 2015.