

Kelman, I. and T.A. Mather. 2008. "Living with volcanoes: The sustainable livelihoods approach for volcano-related opportunities". Journal of Volcanology and Geothermal Research, vol. 172, no. 3-4, pp. 189-198.

Abstract:

Although the negative impacts of volcanism on society are well documented and accepted, many possible benefits from volcanoes are not always fully considered. This paper provides suggestions for understanding and implementing volcanoes' benefits by suggesting further application of existing risk management frameworks to volcanology: living with risk by using the sustainable livelihoods approach at the local level. This paper presents an overview bringing established paradigms into volcanic risk management where they are sometimes absent despite their advantages. The sustainable livelihoods approach is important in its application to volcanic scenarios in four ways:

- (i) Understanding, communicating, and managing vulnerability and risk and local perceptions of vulnerability and risk beyond immediate threats to life.
- (ii) Maximising the benefits to communities of their volcanic environment, especially during quiescent periods, without increasing vulnerability.
- (iii) Managing crises.
- (iv) Managing reconstruction and resettlement after a crisis.

An overview of case studies is provided showing how volcanic opportunities could be used for sustainable livelihoods. The approach of living with volcanic risks and benefits could be adopted and implemented as an integral part of changing perceptions of volcanoes and of managing volcano-related crisis and non-crisis situations. However, the sustainable livelihoods approach is not a panacea, so limitations are discussed along with why living near a volcano cannot solve all livelihood concerns. In particular, livelihood diversity and livelihood transferability to other locations assists in living with volcanoes.