



## **Citizen science using mobile phone technology in St Vincent & the Grenadines to facilitate near-real time multi-hazard observations**

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Citizen science facilitates resilience building by enhancing citizens' understanding of hazards and risk, whilst also building trust and communication links between citizens, scientists and decision-makers. The British Geological Survey (BGS) in partnership with the University of the West Indies Seismic Research Centre (SRC) in Trinidad and the National Emergency Management Organisation (NEMO) of St Vincent and the Grenadines has been investigating the potential application of smartphone apps for citizen science in St Vincent and the wider Caribbean. Through this partnership and a series of stakeholder workshops in St Vincent, a new prototype citizen science platform has been in development – myHAZ. The platform comprises (1) a cross-platform app for users to upload their own hazard observations, including optional targeted questions on multiple hazards and the ability to comment on other users' observations; (2) a data management dashboard for administering incoming observations (by official users); and (3) a public portal for data visualisation and download. The platform includes features specific to identified stakeholder needs in St Vincent, for instance: inclusion of the most commonly occurring hazards, the need for near real-time data publishing and incorporation of offline base maps. The fundamental components of the platform have worldwide application. Here we present the prototype myHAZ platform and possible future application in other settings for discussion. The research is funded through the BGS Official Development Assistance Programme, acknowledging that empowering citizens is integral to building resilience to environmental hazards in local communities and globally.

The project has demonstrated that there is no 'one size fits all' with regard to citizen science applications, and instead a 'toolkit' of applications is the best approach, with customisable design. As we move into the testing phase (application) of myHAZ in St Vincent (beginning ~April 2019), anticipated research questions include how to integrate the citizen science observational data with other data sources. Application to both real-time decision-making and for the purpose of longer-term hazard assessment and research will be discussed.