

## **Environmental Virtual Observatories (EVOs): prospects for knowledge co-creation and resilience in the Information Age**

### **ABSTRACT**

Developments in technologies are shaping information access globally. This presents opportunities and challenges for understanding the role of new technologies in sustainability research. This article focuses on a suite of technologies termed Environmental Virtual Observatories (EVOs) developed for communicating observations and simulation of environmental processes. A strength of EVOs is that they are open and decentralised, thus democratising flow and ownership of information between multiple actors. However, EVOs are discussed rarely beyond their technical aspects. By evaluating the evolution of EVOs, we illustrate why it is timely to engage with policy and societal aspects as well. While first generation EVOs are primed for scientists, second generation EVOs can have broader implications for knowledge co-creation and resilience through their participatory design.

**Keyword:** Environmental Virtual Observatories; Knowledge co-creation; Resilience; Information Age