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## Lay People and Experts in Citizen Science: Monitoring Radioactively Contaminated Food in Post-Fukushima Japan

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### Summary

The Fukushima nuclear catastrophe of March 2011 created a boom in independent radioactivity monitoring among citizens in Japan. Drawing on three case studies of monitoring stations in Tōkyō, Kanagawa, and Fukushima, this paper analyzes citizens' practices of monitoring radioactively contaminated food from the perspective of citizen science (CS). It explores if and how the Fukushima nuclear catastrophe challenges lay-expert relations, and assumes that there is a difference between expert and lay knowledge. It does so not because the terms "lay" and "expert" are static features of those individuals involved in science, but rather because of the different contexts in which knowledge production takes place. The paper argues that lay-expert relations in Japan have changed to a certain degree since Fukushima, because independent monitoring was first initiated by lay people — thereby empowering nonprofessional scientists. At the same time, independent monitoring offers professional scientists new contexts for the production of "alternative knowledge." Although it is not included in the Japanese government's policymaking decisions, this alternative knowledge has a transformative potential because it is employed by civil society organizations and the antinuclear movement in Japan. Independent monitoring therefore has a (perhaps unintended) subversive character, and should be considered when evaluating the transformative potential of independent monitoring organizations and when talking about civil society and advocacy with regard to scientific issues.

**Keywords:** Fukushima, citizens' radioactivity monitoring stations,  
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