

SCIENCE AND ACTIVISM IN URANIUM MINING CONFLICTS. LESSONS FROM AFRICA AND BRASIL.

MARTA CONDE PUIGMAL¹; BRUNO CHAREYRON²; MARCELO FIRPO³; RENAN FINAMORE³; BERTCHEN KHORS⁴

1.ICTA - AUTONOMOUS UNIVERSITY OF BARCELONA; 2.CRIIRAD; 3.FIOCRUZ; 4.EARTHLIFE NAMIBIA.

Abstract:

Communities in Namibia, Gabon and Niger have been living near uranium mines for more than three decades experiencing social, environment and health impacts. Although the connection between their health problems and the mines' operation became clear to them, the mining companies always denied actual connections. Knowledge has been produced and used by the companies alone, without including the communities' or the workers perceptions. Dissatisfaction has therefore been growing within local communities and mine workers. In Niger civil society organizations (CSOs) have been formed claiming better access to mines revenues but also wanting to understand the mining process risks and the impacts of radioactivity on their health. In Caetité, Brazil mining has been going on only for 10 years but the impacts on society are already being noticed by the workers and the communities living near them; workplace accidents, tailing dam spills, soil and water contamination. CSOs are also starting to arise in protest.

In addition to all the social and environmental problems related to the exploitation of any kind of mineral, an important hazard of uranium mines is radioactivity and its effects on human health, mainly through the exposure to doses of Low Level Radiation (LLR – under 100 milliSievert). The health impacts of LLR are not well known because they are difficult to measure and not enough studies have been carried out (Brenner, 2012), however the International Commission for Radiological Protection accepts there is no safe radiation dose and risk increases with exposure (Wrixon, 2008). The local population vulnerability is reinforced by the lack of clear information linking the mining and milling activities to the environmental contamination and its effects to human health. We are therefore confronting a situation with high uncertainty and were important issues such as health risks are at stake; this is the field of post-normal science. A different approach to assess radiation risks is needed involving an extended peer community (Funtowicz & Ravetz, 1994).

As part of this extended peer community CRIIRAD, an NGO specialized in radiation monitoring and training, got engaged in this process involving since 2003 local communities in participatory monitoring and educational programs. Independent analysis of radiation on soil, water and air are being carried out by its team to ascertain the present impact. FIOCRUZ in Brasil, an organisation specialized in environmental health, have been engaging with local communities contrasting the knowledge produced by the mine and helping local communities understand the mining process and its impacts. The communities use this new produced knowledge in activist activities to ask, for example, better safety procedures for the mine workers or the removal of radioactive contaminated material from public use. They are engaging in science-led activism. Local communities realize that in taking part in the knowledge production process they

can understand the impacts better, appropriate the knowledge produced and use it for their own advantage.

This is the type of liaison promoted by the EU-funded project EJOLT (Environmental Justice Liabilities and Trade) that aims at promoting mutual learning between CSOs (from North and South) and academic research. With EJOLT funds, this process of bottom-up knowledge production is also being carried in Namibia and Caetité. The article describes the processes initiated in Namibia and Caetité as well as a summary of CRIIRAD's experiences in Niger and Gabon.

References

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