

Tantalum Mining in Africa's Great Lakes Region: A Case Study for Sustainable Mining Sector Development?

P. Schütte¹, U. Näher², M. Liebetrau³

1.

Research Associate, Federal Institute for Geosciences and Natural Resources, Hannover, 30655, Germany. Email: philip.schuette@bgr.de

2.

Project Manager, Federal Institute for Geosciences and Natural Resources, Kinshasa, Gombe, DR Congo. Email: uwe.naeher@bgr.de

3.

Business Development Manager, talpasolutions GmbH, Essen, 45327, Germany. Email: mirko@talpasolutions.com

ABSTRACT

For many years, Australia represented the world's major tantalum supplier. However, due to economic constraints in the tantalum market, the country lost this status in 2009. Only recently, Australia re-emerged as a growing tantalum producer which is now mainly extracted as a by-product of lithium mining. During the temporary absence of Australia, Africa's Great Lakes region – mainly the Democratic Republic of the Congo (DRC), Rwanda and Burundi – has established itself as the world's largest tantalum producer. However, the production from the region is associated with challenges related to the often informal nature of artisanal and small-scale mining as well as smuggling and conflict financing risks along the supply chains of "coltan". Data on the productivity and capacities of artisanal and small-scale mining operations as well as research on the viability and size of the underlying ore deposits are scarce. This implies a range of sustainability challenges for the Great Lakes region's tantalum production.

In the present contribution, we review mineral economics and local socio-economic factors as well as global policy developments that influenced the dynamics of the last decade of artisanal and small-scale tantalum mining in the Great Lakes region. These include push and pull factors such as the impact of commodity prices and their role as potential drivers of artisanal and small-scale mining, investment practice and revenue distribution along local supply chains, and international due diligence requirements to facilitate formal exports and access to certified tantalum smelters. We conclude that, overall, conflict mineral regulations catalysed formalizing local artisanal mining supply chains as a base for improved transparency and international credibility. However, many artisanal mine owners seek to maximize short-term profit without due consideration for a longer-term sustainability perspective.