

Sustainable Restitution/Recultivation of Artisanal Tantalum Mining Wasteland in Central Africa

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

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Hundreds of unregulated artisanal mines for tantalum ("coltan") and tin have been and still are worked in Burundi, eastern Congo (Kivu), Rwanda and Uganda. Earlier industrial mining declined because of various reasons. These activities transformed large areas into degraded and hazardous land. To mitigate this situation, the aim of our project is to produce a sciencebased,comprehensive, yet flexible system of methods and technologies which will guide administrations and local communities in dealing with the heritage of unregulated "coltan" mining, using the Gatumba mining district in Rwanda as an example. Including socioeconomic factors, the guideline system will help to restitute affected land and water resources towards sustainable use. We will also develop models for a mutually beneficial partnership between large-scale mining (currently in the planning stage) and artisanal mining, as a contribution to sustainable rural development. We will focus on three main GIS-based research sectors, comprising i) a geological and geochemical module, ii) a hydrological and groundwater module, and iii) a module encompassing soil, biological, agricultural, socioeconomic and ecological data, including present (and proposed future) productive use.

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