Towards developing a framework to manage mining-induced land degradation in rural areas of Zimbabwe: a review

Elvis Batsirai Gumbo, Mark Makomborero Matsa, Pedzisai Kowe, Tapiwa Shabani & Takunda Shabani

Abstract

Mining significantly contributes to the development of local communities across the globe. However, mining activities present various detrimental impacts to the natural environment in developed and developing nations. The scenario is more visible in developing countries particularly in rural areas where most of the mines are located and rural areas in Zimbabwe are not spared. Nevertheless, Sustainable Development Goals complemented by Zimbabwe Vision 2030 advocates for activities which support sustainability and mining is not excluded. Achieving sustainable mining activities require adequate data related to environmental problems associated with mining activities. Therefore, this research focuses on unearthing mining-induced land degradation in rural areas of Zimbabwe using already existing literature. In Zimbabwe legal and illegal mining activities characterised by open pits and vegetation destruction are practised in rural areas. Despite the existence of a legal framework directed to mining activities, mining induced land degradation is common due to numerous socio-economic and political problems. Dealing with mining induced land degradation in rural areas is currently more difficult due to utilisation of approaches which are almost fragmented. Existing strategies are characterised by lack of coordination among institutions, policy makers and law enforcers translating to duplication of efforts and misunderstandings among accountable stakeholders. To worsen the scenario, there is limited participation of local communities leading to failure of measures implemented to curb mining induced land degradation. After being informed by the existing situation, the review paper develops a framework with potential to address the problem of mining induced land degradation in rural areas of Zimbabwe.

Keywords: Mining, Mining-induced land degradation, Management practices, Rural areas, Sustainable framework, Zimbabwe