

Gold Panning and Sustainable Management of Renewable Natural Resources in the Circle of Kéniéba in Mali

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ABSTRACT

This research focuses on artisanal gold mining and its implications for access to renewable natural resources in the circle of Kéniéba in Mali. The study aims to highlight how gold panning compromises people's access to renewable natural resources. Through an analysis of mining texts and current practices of the gold panning activity, the study also seeks to better understand the factors which are at the root, or which favor these risks of non-access to resources. The analysis is mainly based on methodological techniques such as documentary analysis, field visits and the collection of data on the quality of surface water. The results of the study show that gold panning seriously compromises the access of current generations to renewable natural resources such as soil, surface water, forests and mortgages the sustainability of these resources. The study highlights a strong sedimentation of the bed of the Falémé causing in several places the stoppage of the flows. The interpretation of water samples shows a high concentration of several physico-chemical parameters. The analysis of the Ryznar index or Ryznar stability index (RSI) which is a composite index shows that the waters of the Falémé are in a situation of severe to very significant corrosion. They are aggressive and corrosive. The values measured all along the Falémé are all higher than the international standard. The study also highlights a proliferation of borehole installations equipped with pumps to draw water which is stored in basins from which gold miners get their supplies. Uncontrolled withdrawals risk having an impact on the availability of the resource. Another major impact of gold panning revealed in this study concerns the deforested areas for the installation of sites and placers which can extend between 1ha to 3ha and the large volumes of steres for the support of the galleries. This activity is a major factor in deforestation and therefore in the reduction of carbon sinks. The shortcomings, on the one hand in the texts which regulate the artisanal exploitation of gold and on the other hand, in the very application of these texts, are the main factors which favor these impacts of the gold panning activity. on resources. The development of regulations specific to gold panning, the creation of a technical unit dedicated to the management of artisanal gold mining, the involvement of local authorities and gold miners in the delimitation of corridors of panning and the observance of good environmental practices will help to preserve the renewable natural resources in the gold panning areas.

Keywords: Gold panning, Sustainable development, Renewable natural resources, Kéniéba

