## Contribution of Gold Panning to the Dynamics of Land Occupation in Burkina Faso: Case of the Province of Ioba in the South-West.

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## **ABSTRACT**

The extension of gold sites in recent decades in the province of Ioba is accompanied by significant socio-environmental changes. This study aims to assess the impact of the phenomenon on land use in the area. Quantitative and qualitative data were combined. Reasoned sampling made it possible to investigate 250 players in the field. Quantitative information concerns the processing of satellite images and socio-economic surveys. Qualitative data includes information from focus groups, interviews and direct observations. Among the collection tools, there are Landsat 7 satellite images from 2000 and 2010, and Landsat 8 from 2020 with 30 m resolution: the individual questionnaire, the GPS. The data was processed with different tools. Image processing was done with Envi 4.5 software, and the result mapped with ARCG is 10.1; socioeconomic data were analyzed with Spss 20.0; the illustrations and the writing of the document were respectively made with Microsoft Office 2016 Word and Excel software. The data analysis made it possible to identify about sixty gold sites in the province, including about ten semi-mechanized other crafts. The diachronic study of land occupation showed a decrease in the area of tree savannah from 36 to 13%, shrub savannah from 43 to 44% between 2000 and 2020. At the same time, rainfed crops and areas bare have seen their extents increased respectively from 17 to 39% and from 0.44 to 1%. There is a strong degradation of plant, soil and wildlife resources. Part of the population is delighted with the extension of the activity because it contributes to improving their living conditions, while the other deplores the decline in morals and the social imbalance. It is important to develop strategies for overseeing the activity so that it can contribute to the development of local communities through participation in the annual budget and the achievements of players in the sector, while preserving the balance of ecosystems.

**Keywords:** Gold panning, Land occupation, Province of Ioba, Burkina Faso



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