

# MINING

## REVIEW AFRICA



## DRIVING GROWTH ACROSS AFRICA

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## CRITICAL MINERALS PROJECTS IN AFRICA

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### IN THE SPOTLIGHT P6

“The US is increasingly turning its attention to Africa, recognising the continent as one of the world’s most resource-rich regions.”

ZACK HARTWANGER, Open Mineral



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# Knight Piésold

## Sustainable projects in DRC through baseline studies

The Democratic Republic of Congo (DRC) is home to vast natural wealth and foreign mining and renewable energy interests. However, this often leads to challenges in understanding local communities and their needs, necessitating a study of local social dynamics. **AMELIA BRIEL**, manager of the Environmental Section at Knight Piésold South Africa, discusses the significance of social baseline studies with **PENELOPE MASILELA**.

**K**night Piésold's decade-long experience in social studies provides clients with a comprehensive understanding of communities' current status, covering areas such as demographics, health, education, livelihoods, infrastructure, and local perceptions of projects. The company has led numerous studies in the mining and renewable sectors across various communities in the

DRC. These studies focus on assessing socio-economic conditions, evaluating project impacts, and supporting companies in making informed decisions about community investment and social engagement.

A diverse range of baseline studies are available through their technical specialists across many fields, including air quality, climate studies, groundwater, water quality, geochemistry, soil studies, flora and fauna, fish and aquatics,

wetland assessments, and traditional use/knowledge studies. Their approach, which is supported by local partners, ensures that studies are accurate, efficient, and acceptable to regulators and lenders.

### Understanding social baseline

Briel explains that the social baseline studies form the bedrock of Knight Piésold's work in the mining and



The best community gatherings take place under the mango trees



renewable sectors. They are designed to understand the socio-economic receiving environment and needs of communities in the areas affected by these projects. Surveys can be undertaken at a community level or at a household level, depending on client requirements. "Our approach to household surveys involves surveying a statistically representative sample of individuals across different villages or communities within the project's area of influence. This data provides a clear snapshot of current social conditions, ensuring that the impact on local communities is accurately assessed," adds Briel.

A unique feature of Knight Piésold's social studies is their focus on both the actual and perceived impacts of mining projects. As Briel explains, "There's sometimes the real, measurable impact, but then there's also the perceived impact." She further says both are crucial, as perceived impacts can be just as significant as actual changes in community dynamics. For example, a community near a mine may feel that its livelihood activities are under threat, even if objective data does not support that claim. "Our role is to not only determine these perceptions but to advise clients how to address them through strategic communication and social investments," says Briel.

“For every dollar that you invest, you want to know that that dollar is making a difference in the life of a community or a person.”

**AMELIA BRIEL**



One of the most critical outcomes of a social baseline study is a social needs analysis. Briel says this analysis helps identify areas where the mine can make the most meaningful investment. "Through a combination of community feedback, observations, and data analysis, we help prioritise initiatives like healthcare, education, or infrastructure that can truly make a difference. Mines can then use the analysis to inform their Cahier des Charges (social term sheet in DRC) or their contribution to the 0.3% fund (mines need to contribute a portion of their revenue to regional social initiatives)."

Briel further explains that mining companies normally approach Knight Piésold for social baseline studies when they are looking to expand their operations or undertake new projects. "These studies often form part of an Environmental and Social Impact Assessment (ESIA), which is essential for understanding how the project will affect the local community. In some cases, these studies are requested when a company is looking to meet ESG certifications such as the Copper Mark.

### Digital transformation

As data collection and analysis continue to evolve, Knight Piésold



↑ Knight Piésold's social team conducting a household survey in DRC



↑ Livelihood activities in Lualaba Province, DRC





↑ Focus group discussion with women

has adapted its approach to make the process more efficient and interactive. Moving away from traditional paper-based surveys, Knight Piésold now utilises digital tools, including data dashboards that allow clients to visualise social data. “These dashboards are customisable, enabling clients to drill down into data by themes such as demographics, health, education, and livelihoods, with visual representations like maps and graphs to display key findings,” she says.

Briel emphasised the importance of ensuring data accuracy. This is achieved by selecting statistically significant sample sizes, employing a geographically representative approach to sampling, and constantly checking the data throughout the survey process. The introduction of digital data collection tools has allowed Knight Piésold to significantly streamline the process, ensuring that any inconsistencies are addressed quickly, and that the data is both accurate and actionable.

### Overcoming challenges

Conducting social baseline studies in remote and sometimes inaccessible regions, like the DRC, comes with its own set of challenges. While language barriers are not a major issue—Knight

Piésold employs Swahili-speaking teams—geographic and environmental factors, such as seasonal rainfall, can impede survey efforts. Despite these challenges, Briel notes that working in the DRC is always a wonderful experience due to the open and welcoming nature of local communities. She expressed appreciation for how receptive the people were to Knight Piésold’s work, contrasting it with the more cautious approach often seen in other regions.

The objective of baseline studies is to be able to direct mining or renewable energy companies towards making informed decisions on investment into social development. As Briel explains, “For every dollar that you invest, you want to know that that dollar is making a difference in the life of a community or a person.”

Looking into the future, Knight Piésold sees social data playing an even more significant role in the future of mining projects. As global ESG standards tighten, especially around areas such as tailings management, timely and correct social data is critical for compliance. Additionally, companies can benefit from Knight Piésold’s social studies to ensure their projects align with community needs and contribute positively to local development.

While technology continues to advance, “AI may assist with parts of this process, for example data management, but capturing the social structure of a community will always require the insights of real people. In that sense, social baseline studies will be a fundamentally human science despite the technological tools that will constantly make analysis quicker and more nuanced,” she concludes.

KP’s core social team comprises Sabelo Cele (social scientist), Barclay Mwanza (environmental scientist and local team leader) and Louisa Mokwena (GIS specialist). **MRA**



↑ Household survey, DRC