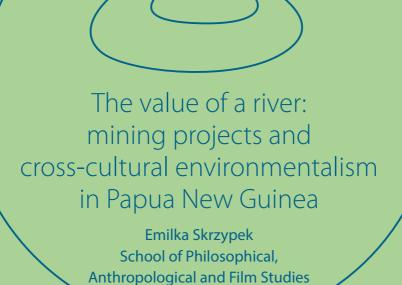
STACEES



The Sustainability Series



The value of a river: mining projects and crosscultural environmentalism in Papua New Guinea

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One of humanity's most pressing challenges is how to reconcile our need for natural resources, including metals and minerals, with the impacts that mining has on the climate, habitats and people who live near mining projects. As a major industry in both developing and developed countries, resource extraction is a fundamental part of the global economy. In addition to the fossil fuels and heavy metals used in conventional industry, mining provides materials that are essential for transition to green energy technologies.

However, extracting these resources comes at a cost to the local environment and its inhabitants. Any project involving large-scale mining or dam building raises ethical questions about the effects it will have on the surrounding area and its people that must be weighed alongside practical considerations. These issues can be particularly fraught when different communities, companies and governments, all with a range of cultures, priorities and worldviews, collide over projects that have both potential benefits and significant risks.

The value of Frieda River

Frieda River is a tributary of the Sepik, a vast river that runs through northern Papua New Guinea (PNG). A globally important ecosystem, the Sepik River is over 1100 km long and one of the largest intact freshwater basins in the Asia-Pacific. The Sepik region is home to around 300 language groups, making it one of the most linguistically diverse areas on the planet, and 430,000 people who depend on the river for a living. The region is part of the world's third-largest rainforest after the Amazon and the Congo Basin rainforests.

Frieda River is also home to one of the largest undeveloped copper and gold deposits in the world. Mining at Frieda could produce an estimated 175,000 tonnes of copper per year as well as a substantial amount of gold. Any project to mine at Frieda River would mean bringing industrial development to an ecologically sensitive area and on land that belongs to indigenous people. At the core of debates surrounding a mine is a proposal for an integrated storage facility at Frieda River, where all mining toxins would need to be stored underwater in perpetuity. Any damage to the dam would have devastating effects – posing risks to not just the environment, but to the livelihoods and lives of the Sepik communities living on the banks of the river

Although deposits were discovered in the 1960s, development intensified in the mid-1990s. In the last decade, plans to develop a mining project at

Frieda River have reached an advanced stage. In 2018, the company proposing development submitted Environmental Impact Statement (EIS) to the PNG government as mandated by domestic law. In PNG, the approval process for a new mine requires the company to prepare an EIS to identify the impacts and risks associated with the proposed venture. Once submitted to the government regulator, the EIS is available for public consultation during which groups and individuals can review and comment on the document. Both the EIS and the reviews are then considered by the government as it decides whether to approve a new mine.

Dr Emilka Skrzypek, Senior Research Fellow in the School of Philosophical, Anthropological and Film Studies, is an anthropologist specialising in the dynamics of encounters between exploration companies and local communities. Working with her Research Assistant Sonja Dobroski, her Scottish Funding Council-funded 'Local Effects, Global Assemblages, and Assessing Future Impacts of Undeveloped Mining Projects' focuses on the EIS review process for the proposed Frieda River mine.

Rather than simply analysing the pros and cons of the Frieda River mining development, Skrzypek is looking into the review process itself. When assessed from a range of perspectives, including that of people who live in the vicinity of the proposed mine, how valuable and effective is the EIS review? How has the process generated new relationships between those favouring and those opposing the mine? Were particular groups marginalised from the review process, and what cultural, commercial or political positions were prioritised – consciously or not – by the EIS review process? How is the EIS perceived by those involved or otherwise affected by it? Is it biased in favour of one outcome? In theory, the EIS should address the imbalance that leads to some voices being heard much more easily than others when it comes to proposals for large-scale resource extraction. Does that theory hold true in practice?

International conversations

Little is known about how groups of people and organisations come together in response to the EIS. These congregations are at the heart of Skrzypek's research, which looks at how the process involves a fascinating coming-together of different worldviews. Indigenous communities opposing the Frieda River development rely upon an international combination of advisors, lawyers, environmental organisations and journalists whose expertise lends authority to their campaign. At the same time, these international allies are less familiar than locals with the actual environment that they are seeking to protect. So, they rely on accounts from those who know the river well and see their role as supporting and amplifying indigenous voices.

There are a host of political reasons why international partners are important

within the Save the Sepik Campaign to resist the mining development, but Skrzypek identifies some factors intrinsic to the EIS itself. The report is written in highly technical English, for instance. It stretches over 7000 pages long and is the result of millions of dollars of funding. It also assumes that the mine is an exercise in logistics, finance and technological capabilities. This worldview contrasts with the priorities of local people resisting the mine, whose culture is intrinsically linked to the Sepik. For them, the river is a living spirit celebrated in songs and stories. It has its own voice, and is part of a tight web of cultural, spiritual and ecological connections drawing together plants, animals, water and human beings.

In their declaration of opposition to the mine, a federation of village elders stated that they were acting under the authority of the Supreme Sukundimi, the River God, and in the name of the ancestral spirits inhabiting the landscape. The elders demonstrate a connection to the land that is far removed from the language and priorities of international corporations, and view the area according to a timescale that is very different from the 33-year projected lifespan of the mine: 'The Sepik River is not ours. We are only vessels of the Sepik Spirit that dwells to protect it. We will guard it with our lives'.

Reconciling local culture, environmental concerns, corporate interests, government bureaucracy and international activism is a challenging task. Still, it is one that the EIS and process of EIS review are meant to fulfil. Skrzypek's research aims to shed a light on this process. While the case study focuses on one development on the Frieda River, its findings are relevant across the world as we strive to meet our need for natural resources in the face of environmental and social concerns.

Find out more

Researcher profile: <u>www.st-andrews.ac.uk/social-anthropology/people/ees7</u>

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