



POPARTIC

Natural resources

Is mineral-rich Madagascar open for business?

By Giles Crosse

Mineral extraction in Madagascar epitomises the challenges of sustainable development in impoverished and unstable countries rich in natural resources

Madagascar, the fourth largest island in the world, is famous for its biodiversity – it is home to thousands of species of plants and animals found nowhere else on Earth. It also has a wealth of mineral resources: graphite, ilmenite, chromite, coal, bauxite, rare Earth elements, salt, quartz, tar sands and semi-precious stones.

But the country's recent history has been blighted by violence. A political coup in 2009 was sparked by an attempted land grab by South Korean multinational Daewoo, seeking to grow agrofuels, maize and palm oil on 1.3m hectares of ancestral lands.

Land grabbing has been an ongoing problem. As well as leading to 2009's coup, which ousted the then Madagascan president, Marc Ravalomanana, land grabbing and accusations of corrupt government involvement have led to the withdrawal of foreign aid, civil unrest and the ruined condition of Madagascar's economy.

Madagascar is one of the world's poorest countries. According to the World Bank, 70% of the island's 22.6 million population live on less than \$2 a day and 59% on less than \$1.25.

But its richness in natural resources means that foreign mining, oil, tourism and agricultural businesses have all set their sights on Madagascar. The island, therefore, has the potential to serve as a testing ground for sustainable development.

Foreign investors, generally, acknowledge the principle of free, prior and informed consent (FPIC), which requires communities to be informed about commercial projects and given the opportu-

nity to approve or reject them, and many of the big extractive players have committed to follow these rules.

Elections have just been completed (in January 2014), the first legal polls since 2009. Hery Rajaonari-mampianina is, in theory, the new president, but ongoing disputes over the results continue to add volatility to the island's heady political atmosphere. Policymaking is therefore difficult, just when Madagascar needs stability, not least to develop the confidence of nervous international extractive sector companies.

So, overall, Madagascar is a mess. Against this background, however, Rio Tinto, which began exploration in 1986, initialised production activities for ilmenite – which is used in the production of titanium oxide – in 2009. The company wishes to be seen as an example of how partnership with government can provide a route to development for the island, with its huge resource base and pressing need for investment and jobs.

But can Madagascar's destitute indigenous population and a modern extractive business ever be successfully married?

Foreign investment

Madagascar, supported by the World Bank, has been actively encouraging foreign direct investment since the 1990s. But the resulting projects have not always been seen to benefit the local communities.

Gemma Holloway, sustainable development consultant to Rio Tinto, says: "In recent years, the number of projects has increased, including land

Madagascar: fast facts (2012)

Population: 22.29 million
GDP: \$9.975 billion
GDP growth: 3.1%
Inflation: 6.4%

Rio Tinto

Major products:

aluminium, copper, diamonds, thermal and metallurgical coal, uranium, gold, industrial minerals (borax, titanium dioxide and salt) and iron ore.

Employment: 67,000 people work in more than 40 countries across six continents.



AURELIE

Malagasy fishermen depend on clean rivers

leased for food production, agro-fuel production, cash crops and mining. There is little transparency in these foreign investment deals and the Malagasy people often do not know anything about the projects.”

Holloway explains that Malagasy civil society is, in general, fragmented and very often insufficiently organised to be able to voice their concerns and apply pressure to government to reverse decisions over the lease of land to international companies.

Has Rio Tinto taken a different approach? Holloway suggests so. “Rio Tinto has publicly committed to integrating sustainable development into its corporate strategies because it makes good business sense.”

The company’s operation in south-east Madagascar, QIT Madagascar Minerals (QMM), is “a test case for this commitment” she says, as it is located in an area of extremely rich and unique biodiversity where poverty levels are high and dependence on natural resources such as food from the forests is widespread.

Rio Tinto’s stated aim is to achieve a net positive impact on biodiversity over the course of its opera-

Timeline: Land grabbing in Madagascar

1896	Madagascar becomes a French colony .
1960	Declaration of independence .
2003	Immigration law authorises the purchase of land by foreign entities investing over \$500,000 .
2008	Law allowing foreign companies with a Madagascan subsidiary or business partner to purchase land.
2008	Daewoo leases 1.3m hectares of arable land for cash crops.
2008-2009	Demonstrations against the Daewoo project.
2009	Civil-military coup in Madagascar: the new regime announces the end of the Daewoo project and a willingness to renegotiate major mining contracts .
2010	New procedures for the acquisition of large areas of land, over 2,500 hectares .
2011	Adoption of a plan that prohibits the regime from making new long-term commitments that will tie the future government, after 2013 elections .

tions in Madagascar. It will do this, Holloway says, through implementing a “mitigation hierarchy” of avoidance, minimisation and rehabilitation. But is Rio Tinto in fact acting positively, for either the land or the people?

Local activist groups in Madagascar recently

QMM's environmental and social impacts

Rio Tinto says it wants to keep the **impact** of its **QIT Madagascar Minerals** (QMM) project, which extracts **ilmenite** for the production of **titanium**, to a minimum. "The mine deploys a dredging process whereby ponds are dug, filled with water and a floating dredger separates out the ilmenite from the other particles," the company says. "This technique disturbs only a small area of land at a time, and the process of **rehabilitation and restoration** of that area with fast growing and indigenous species begins immediately."

In the mid-1990s QMM set up a full-time **social and environmental** programme and a "legal and fiscal framework agreement between QMM and the Madagascar government was concluded in 1998, when it was ratified and made into law", Rio Tinto says. QMM conducted a formal social and environmental **impact assessment** between 1998 and 2001.

There have been many challenges for Rio Tinto and QMM. Despite the stated aims, local **stakeholders** have yet to be properly brought on side. Gemma Holloway, sustainable development consultant to Rio Tinto, says: "Thus far, QMM has struggled to engage communities and to implement effective **social development projects** to improve the wellbeing of local people affected by the mine."

There's some progress on environmental impacts, Holloway says. "There have been more positive outcomes in the **biodiversity** arena, particularly in research projects and through collaborations with partners such as **Kew Gardens** [in London] and **Missouri Botanical Gardens**. The company's track record on the environmental front has, however, been far from exemplary and its involvement in forest management in the areas around its existing and future mining sites has **aggravated relations with local communities**, and in some areas led to increased forest degradation and communities retaliating against their loss of ownership of local resources."

Countering this, Rio Tinto says there has been **close dialogue** and support for the community right from the beginning. Speaking to Ethical Corporation, the company says it "listens to the community's expectations" in order to "anticipate risk of confrontation" with the people living near the mining activity. The company says it has been developing **communication** with the community to "ensure better understanding of the project's objectives and activities, in order to restore an atmosphere of **mutual confidence** between both parties".

Holloway suggests that glossy brochures and web pages with photographs of tree nurseries and indigenous people do not equate to socially and environmentally sensitive operations on the ground.



St Luce village – QMM's operations of deep concern to locals

"Whilst Rio Tinto's corporate intentions are certainly more laudable than those of other mining companies operating in Madagascar, they have a long way to go to fulfil their environmental and social commitments to local stakeholders, to the Madagascar government and to their shareholders," Holloway says. "There is **much work to be done** before the stories of communities affected by their mining operations in southern Madagascar match the descriptions of the same areas in corporate communications documents."

Rio Tinto says it is taking measures aimed at reducing the impacts of **population migration**, as Malagasy people flock to the mining operations in search of work. These include "anti-**HIV/Aids** measures for employees and the community, reinforcing urban security, supporting improved **hygiene and health infrastructure** and promoting dynamic regional **economic development**".

Rio Tinto's stated aim is to achieve a net positive impact on biodiversity

cooperated to develop a report – Land grabbing in Madagascar – which was published in late 2013. The report analyses QMM and Rio Tinto's work, and it's not all good news. "The construction of Ehoala port, the pollution of rivers and the ecosystem changes caused by the mining activities have caused great harm and significantly reduced fishing," the report states. "According to local people, the cost of living in the region has tripled since the start-up phase of the mine. In 2013 only 600 jobs were provided."

Testimony from Malagasy people in the report is occasionally positive – "QMM built wells for the local community and a hospital" – but locals also voice their anger: "This land is the land of our [ancestors] and QMM will [also] take our crops. Even if they give us money for our land, it will not be enough for the rest of our lives."

Holloway says QMM will compensate the locals through the "development and implementation of biodiversity offset zones and additional conservation activities".

The company is working with a range of international conservation experts to achieve its goal of net positive impact (NPI), including the International Union for Conservation of Nature, the Biodiversity Consultancy and Missouri Botanical Gardens.

Holloway argues: "The company recognises the importance of working with communities ... and is developing a strategy which will incorporate plans to deliver on NPI, whilst working with communities and other stakeholders to improve natural resource management and promote long-term economic development."

And Rio Tinto says it is making a real commitment to Madagascar. "QMM is a joint venture with the Madagascar government. They own 20% and it is anticipated that the mine will continue for 40 years, so this is a long-term partnership," Rio Tinto tells Ethical Corporation.

The total cost of Rio Tinto's investment in Madagascar and Canada – where the ilmenite is processed – to get the project to completion is \$1.1bn, with \$940m of that invested in Madagascar.

QMM – a long-term project

QIT Madagascar Minerals (QMM) is **80%** owned by **Rio Tinto** and **20%** owned by the **Madagascar government**. It has built a **mineral sands mining operation** near Fort-Dauphin at the south-east tip of Madagascar. QMM intends to extract **ilmenite** and **zircon** from heavy mineral sands over an area of about 6,000 hectares along the coast over the next 40 years.

Current mining activity is at the 2,000 hectare **Mandena** site, to the north of Fort-Dauphin. Production on this site will eventually reach **750,000 tonnes** a year. Later phases will be at Ste-Luce and Petriky and there is potential to expand production to **2.2m tonnes** a year.

The Fort-Dauphin deposit contains nearly **70m tonnes** of ilmenite. This quantity accounts for about 10% of the world market. On the 2,000 hectares of the Mandena sector of the deposit, a hundred hectares per year will be mined over a period of **20 to 25 years**. The mining complex includes a floating separation unit connected to a dredger, a mineral separation plant, a storeroom, a power plant and a weir.



The grand plan

In the longer term, the deepwater Ehoala Port near Fort-Dauphin in south-east Madagascar – developed by Rio Tinto to export the ilmenite from the QMM operation – also offers scope for the future economic development of the region.

The port is a public/private partnership between Rio Tinto and the Madagascar government. At the end of the life of the mine, the port will become the responsibility of the government. As well as accommodating ilmenite export vessels and ships bringing supplies to the QMM operations, the port is also accessible to cruise ships, container ships and other vessels.

What's next?

Any analysis of foreign investment in Madagascar reveals a complex series of challenges. Rio Tinto is an example of a multinational apparently trying to make a positive impact, while of course doing some good business. But without continued improvements in internal government transparency, the poor Malagasy population remains largely voiceless.



GILES GROSSE

Forests worth conserving

Meanwhile, World Bank and UN observers struggle to leverage financial support, foreign investment and jobs into developing countries, before cash and promises vanish into black holes built by corrupt regimes. Madagascar has been no exception to this historically, though perhaps Rio Tinto and QMM provide an example of how future development can be structured.

Ultimately, within the context of conflicting interests and struggles for power among national and local leaders and international investors, the engagement of local people and the transparency of projects' finances are vital. ■

Perhaps Rio Tinto and QMM provide an example of how future development can be structured



Maximise Shared Value and Eliminate Risk

Maximise Shared Value Achieve closer collaboration and equitable distribution of wealth with your hosts to aid development and secure political stability

Optimise Social Risk Management Hear the latest approaches to systematically build trust with communities and minimise social risk

Integrate Sustainability into Business Embed stakeholder engagement competence into your company and fuse sustainability into management systems

Minimise Human Rights Impacts Remove human rights risks from your security operations, supply chain and business practices

Eliminate Water Risk The latest strategies to identify risk and manage competing interests for water

Ensure Financial Viability Hear from leading institutions their understanding of what successful sustainability is and match this to your own strategy



CONFERENCE Join 150+ Senior-Level Executives over 2 days for the largest high level business discussion for the extractives industry. Focused, exclusive keynote sessions and global leaders for forward thinking best practice



AGENDA Targeted case studies for oil, gas and mining sustainability practitioners. Join your peers for the most targeted and relevant discussions to your role



NETWORKING Benchmark against and learn from your corporate peers with **over 18 hours of best practice and future strategy planning**. You will leave with valuable contacts and takeaway solutions which you can put into action

HEAR FROM THE FOLLOWING SUSTAINABILITY LEADERS:

RioTinto

Global Head of External Affairs
Robert Court

BG GROUP 

Group Head of Social Performance
Ramanie Kunanayagam

Teck

Senior Vice President, Sustainability and External Affairs
Marcia Smith



Vice President, Corporate Social Responsibility
Paula Luff

BLACKROCK

Managing Director and Global Head of Corporate Governance
Amra Balic


International Council on Mining & Metals

Deputy President and Senior Program Director
Aidan Davy


BARRICK

Vice President, Asset Protection and Crisis Management
Mark Wall



Wharton Professor, author of "Corporate Diplomacy"
Witold Henisz


Statoil

Vice President, Strategy and Policy – Corporate Sustainability
Charlotte Wolff-Bye


Unilever

Global Vice President for Social Impact
Marcela Manubens

OFFICIAL SUPPORTING PARTNERS:


International Council on Mining & Metals

