

# ***Madagascar: The New Eldorado for Mining and Oil Companies***



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## INTRODUCTION

Current production and consumption habits in the countries of the Global North are leading to over-consumption of resources such as oil, minerals, water and wood. This has resulted in low-cost access to raw materials becoming the priority for states and multinational corporations that wish to meet this growing demand. This frenetic race to gain access to raw materials is leading to an increase in the extractive industry's projects, continually pushing the boundaries of the acceptable to new heights. These demands are being met at the expense of the environment and local communities, essentially in the countries of the Global South, which is where most of these resources are located. What is going on is nothing less than plundering and, for local communities, the extractive industries are often synonymous with destruction and contamination of their environment and livelihoods.

Madagascar has an impressive mining potential, and therefore constitutes a new prey for this kind of 'extractivist' approach. With legislation that is particularly favourable to big industrial groups, the previously 'artisanal' extractive activity has in recent years entered a new phase, with the introduction of huge mining projects and the growing interest that multinationals are expressing in Madagascar. Madagascar's social and environmental balances are now seriously endangered by this rush to exploit its underground wealth.

This situation is all the more worrying, given the serious political and social crisis that has persisted in Madagascar for several decades, has considerably weakened the ability of public authorities and communities to fend off the aggressive approach of foreign companies. In a context like this, the increase in extractive industries' activities can only exacerbate the difficulties that the country is already facing. The socio-environmental impacts linked to oil, gas, mining and logging operations could be detrimental to Madagascar's reaching the Millennium Development Goals (MDGs).

## I. MADAGASCAR, A CHOICE TARGET FOR EXTRACTIVE INDUSTRY MULTINATIONALS

### 1. Political crises, poverty and plundering of resources

The political situation in Madagascar has been unstable for many years. A "High Transitional Authority" (HTA) has been governing the country for almost four years. It is led by Andry Rajoelina, the ex-mayor of the capital, Antananarivo. Although not internationally recognised, the HTA came to power in March 2009 after the last president, Marc Ravalomanana, was overthrown. Ravalomanana had become president in a very tense climate, following contested elections that almost led to civil war. His predecessor was Didier Ratsiraka; who came to power in 1975, in equally troubled circumstances.<sup>1</sup>

The political life of Madagascar is marked by *coups d'état* and popular uprisings. It could be summarised as a series of 'crises' with responsibility lying mainly with the local elite and major international powers. The local elites pay little heed to the people, and often favour their personal interests rather than those of the communities whose interests they are supposed to represent. As for the foreign players that are well aware of the increased need for funding in Madagascar, and the country's mineral wealth and geo-strategic importance, they rarely hesitate to make their influence felt in Madagascar's domestic matters.

Local communities in Madagascar are rarely listened to, are victims of chronic instability and are deeply poverty-stricken. In the course of the last forty years, economic growth has been negative.<sup>2</sup> This situation has further deteriorated since the 'political crisis' broke out in 2009; it has severely paralyzed the country, and has led to international aid programmes being suspended. As the United

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<sup>1</sup> He had been forced to leave power in the early 1990s, following popular uprisings, before being re-elected in 1997

<sup>2</sup> World Bank: *Madagascar - Après Trois Ans de Crise: Evaluation de la Vulnérabilité et des Politiques Sociales et Perspectives d'Avenir*, May 2012, Graph 2.1, PIB par habitant et Pauvreté (1960-2011), p. 9 ([http://siteresources.worldbank.org/INTMADAGASCAR/FRENCH/Resources/ESW-Protection\\_sociale\\_vol1.pdf](http://siteresources.worldbank.org/INTMADAGASCAR/FRENCH/Resources/ESW-Protection_sociale_vol1.pdf)).

Nations Special Rapporteur on the Right to Food, Olivier De Schutter warned in December 2011, over two-thirds of the population of Madagascar (76.5%) are now living below the poverty line, set at 468,88 Ariary (160 euro) per person per year.<sup>3</sup>

Given this situation, the people of Madagascar are the first victims of the growing predatory approach of the international corporations that are trying to take the utmost advantage of the island's mineral potential. The International Monetary Fund and the World Bank are very much responsible for this situation, as they have encouraged the Malagasy leaders to 'liberalise' the economy in order to make it more "attractive" to foreign investors. This in turn has led to the weakening of public authorities. On the pretext of re-energising the economy, these foreign firms have been granted tax breaks, while tax-free zones have sprung up all over the country. Meanwhile, labour laws and regulations have also been made more 'flexible'.<sup>4</sup>

Other natural resources of Madagascar, such as timber, have also been the focus of interest of international corporations. Both under Ravalomanana's and Rajoelina's presidencies, business has increased. First came the revelation of the negotiations between the Malagasy authorities and the South Korean company, Daewoo; they concerned Daewoo's acquisition of 1,300,000 hectares of land<sup>5</sup> in order to plant palm oil and maize. Then came the scandal of the Madagascar rosewood that had been illegally and massively exported to Germany and China, where it is used to make furniture or musical instruments.<sup>6</sup>

## 2. A country of great biological and mineral diversity

Madagascar is the fourth biggest island in the world and is one of the richest areas in terms of its biological diversity. It has been listed as one of the so-called 'mega-diversity' areas<sup>7</sup>, and includes 2% of global biodiversity, and an exceptional number of unique animal and plant species that account for 80-90% of all species on the island. The most famous embodiment of this unique wealth is undoubtedly the lemur that has become the country's symbol. But Madagascar is also home to hundreds of other endemic species: reptiles, butterflies, birds, amphibians. The same can be said of the flora: as well as the various varieties of baobab trees, featured on tourist brochures, there are thousands of plant varieties that have been listed in Madagascar alone (triangular palm trees, orchids, raffia, viha etc). Many of these rare species are now under direct threat from oil and mining development projects. This natural wealth is being threatened on a number of fronts, including by the push to develop oil, gas and mineral resources, while it should be fully protected for future generations.

Madagascar is famous for its exceptional biodiversity, but it also interests geologists, as the island has long been identified as having a great variety of mineral resources. The land on Madagascar is known to contain a wealth of precious stones, bauxite, nickel, iron, coal, gold and rare earth elements.<sup>8</sup> Between 1946 and 1968, the French Atomic Energy Commission (CEA) singled out the uranium reserves and exploited this mineral in Vinanikarena, (south of Antsirabe, in the centre of the country), as well as in the river Mandraré area, (in the Tranomaro region in the southeast).<sup>9</sup> At the end of the

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<sup>3</sup> Report by the UN Special Rapporteur on the Right to Food, Addition Mission to Madagascar (A/HRC/19/59/Add.4), 26th December 2011, p. 3 ([http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session19/A-HRC-19-59-Add4\\_en.pdf](http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session19/A-HRC-19-59-Add4_en.pdf))

<sup>4</sup> International Trade Union Confederation, *Internationally recognised core labour standards in Madagascar, Report for the WTO General Council review of the trade policies of Madagascar*, April 2008 ([http://www.ituc-csi.org/IMG/pdf/MADAGASCAR\\_final.pdf](http://www.ituc-csi.org/IMG/pdf/MADAGASCAR_final.pdf))

<sup>5</sup> On the issue of land grabbing, c.f. Perrine Burnod, *Appropriations foncières: après l'affaire Daewoo, que se passe-t-il à Madagascar*, CERI-CNRS, June 2011 ([http://www.ceri-sciences-po.org/archive/2011/juin/dossier/art\\_pb.pdf](http://www.ceri-sciences-po.org/archive/2011/juin/dossier/art_pb.pdf)).

<sup>6</sup> C.f. for example: Hery Randriamalala and Zhou Liu, *Rosewood of Madagascar: Between democracy and conservation*, Madagascar conservation and development, Volume 5, issue 1, June 2010 (<http://www.journalmcd.com/index.php/mcd/article/view/167/128>)

<sup>7</sup> Russel A. Mittermeier et al., *Les pays de mégadiversité*, in Pierre Jacquet and Laurence Tubiana, *Regards sur la Terre*, Presses de Sciences Po, 2008, p. 153-154.

<sup>8</sup> U.S. Department of the Interior / U.S. Geological Survey, 2010 Minerals Yearbook: Madagascar, June 2012 (<http://minerals.usgs.gov/minerals/pubs/country/2010/myb3-2010-ma.pdf>)

<sup>9</sup> Persée, *Revue Scientifique*, L'énergie Nucléaire en France, p14. [http://www.persee.fr/web/revues/home/prescript/article/ingeo\\_0020-0093\\_1965\\_num\\_29\\_1\\_5691](http://www.persee.fr/web/revues/home/prescript/article/ingeo_0020-0093_1965_num_29_1_5691)

1950s, the Société de traitement des sables du sud de Madagascar (Sotrassum), a subsidiary of Péchiney and of the CEA<sup>10</sup> was mining monazite, ilmenite and zircon from the black sands of the beaches and dunes in the southeast of the island. Chromite has been mined since 1968 in Andriamena (west coast) by Comina, now Kraoma, since its nationalisation in 1975.<sup>11</sup> Yet, until recently, sapphires, rubies, aquamarines, tourmaline, topaz, amethysts and emeralds were mined for in an informal and artisanal fashion. However, the Malagasy landscape has now become transformed, with gigantic industrial mines, including QMM/Rio Tinto and the 'Ambatovy Project' run by Sheritt, among the most emblematic.

Oil exploration in Madagascar has a long history, going back to the early 20th century in the Tsimiroro region (west). The French company SERP, (Syndicat des Études et Recherches Pétrolières) set up operations in Madagascar and started drilling for oil in the 1930s, followed by the Société des Pétroles de Madagascar (a subsidiary of ELF) in the 1950s, and finally Chevron, Agip, Amoco and other international companies continued their exploration on the west coast of the island after the country's independence in 1960. They never identified sufficient reserves to merit actual exploitation, as the production costs were considered too high.<sup>12</sup>



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### 3. A very liberal legislation on mining and oil

The World Bank's policy of economic 'liberalisation' for developing countries, led them to support an extensive revision of legislation for Madagascar's extractive sector in the 1990s. This new policy<sup>13</sup> was

<sup>10</sup> Ibid

<sup>11</sup> Chambre des Mines de Madagascar, Kraomita Malagasy S.A (KRAOMA), <http://chambreminesdemadagascar.com/node/6>

<sup>12</sup> C.f. also: *Les richesses du sous-sol*, in *Livre d'or de Madagascar*, Cherifienne Casablanca, 1950, p. 118

<sup>13</sup> On the origins of the legal framework of the extractive sector in Madagascar c.f. Bruno Sarrasin, *Développement minier et protection de l'environnement à Madagascar*, in Bonnie Campbell (Ed.), *Ressource minières en Afrique: quelle réglementation pour le développement?*, Presses de l'Université du Québec, 2010, p. 148-158.

implemented through the new legislation on oil in 1996, followed by legislation on mining in 1999. A law that provided an especially favourable regime for major mining projects came into force in 2002 (Loi sur les grands investissements miniers – LGIM).<sup>14</sup>

The new legislation on oil production is aimed at providing Madagascar with “as favourable a legal framework as possible”.<sup>15</sup> The Office of National Mines and Strategic Industries (L'Office des mines nationales et des industries stratégiques - OMNIS) is a public body created in 1976. Its brief is to oversee all the mining and oil production activities of the country, and it is also responsible for national governance of the oil industry. Prospecting, exploitation, refining and transport are jointly managed with the private oil sector. Companies are required to pay tax on every barrel produced. The level of this tax is linked to the quantity of the oil, and there is also a direct tax levied on each barrel of oil<sup>16</sup>, linked to the tax on profits.<sup>17</sup> As is generally the case in the oil industry, the legislation includes the principle of production being shared between the State and the company that has been granted the exploitation rights. This legal framework fails, however, to stipulate the percentage granted to each partner, and contracts are negotiated on a case-by-case basis under this law. The failure to include a specified compulsory share of the income generated by the oil industry is an important factor in the lack of transparency within the oil sector, and could become an open door to all sorts of corrupt practice.

Madagascar has adopted the World Bank's strategy for the mining sector.<sup>18</sup> Their objective is to facilitate the granting of mining concessions; provide mining companies with favourable tax, legal and export regimes; secure investments; and guarantee free movement of capital. With a 2% mining tax, Madagascar is one of the most 'attractive' mining countries.<sup>19</sup> For investment projects in excess of 50 billion Ariary (approximately 22 million US\$), the law on major mining investments provides even more favourable conditions: the corporate tax on profits is set at 25%, compared with that of 35% in the general tax regime; it even falls as low as 10% if the products are processed in the country. The mining tax is set at 1% of the produce sold for these larger projects.

At first glance, the environmental laws of Madagascar, as applied to the mining and oil industries, appear to be less liberal. But in spite of a legal and regulatory framework that appears to be binding on environmental issues, public authorities find it very difficult to enforce the laws that they have passed.

The legal decree on Environmental Accountability for Investments (“Mise en comptabilité des investissements avec l'environnement” (MECIE)<sup>20</sup>, obliges all investors to engage in an environmental programme or undertake an environmental impact assessment, depending on the type of project. Following the environmental impact assessment, the National Office for the Environment (l'Office national de l'environnement, ONE) delivers environmental permits and imposes Environmental Project Management Plans (Plan de gestion environnementale du projet, PGEP). This lays down the environmental specifications for the project. Companies pay ONE a digressive percentage of the amount of initial investment; this revenue is supposed to fund the agency, the analysis of the environmental impact assessments and the follow-up on the environmental management of the project. In other words, the multinational corporations are funding the body that is supposed to ensure that they are respecting the environmental norms! This obviously constitutes “a serious problem” as the World Bank experts themselves admit, and opens the door to “possible conflicts of interest”.<sup>21</sup>

The weakness of the civil service does not enable the State authorities to exercise the required control over the mining and oil industries. As the experts of the World Bank have underlined, “*Rio Tinto employs almost 100 people in the social and environmental department, which is at least as many as*

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<sup>14</sup> Amended in 2005 respectively by Law n°2005-021 and Law n°2005-022.

<sup>15</sup> Introduction Law n°1996-018.

<sup>16</sup> The rate of this tax on petrol is established on an annual basis by law (IDH). In 2012 the rate levied on natural gas varied between 5 and 20%, depending on the volume produced. The rate levied on heavy crude or bitumen extracted from tar sands is set by contract.

<sup>17</sup> The IDH rate was set at 21% by the 2012 law on finance.

<sup>18</sup> World Bank, Strategy for African Mining, World Bank Technical Paper 181, 1992.

<sup>19</sup> Law n°99-022, exposé des motifs.

<sup>20</sup> Decree 1999-954 of 15th December 1999, modified by Decree 2004-167 of 3rd February 2004.

<sup>21</sup> Jean Christophe Carret, Bienvenu Rajaonson, Paul Jean Feno and Jurg Brand L'environnement à Madagascar: un atout à préserver, des enjeux à maîtriser in World Bank, Madagascar: vers un agenda de relance économique, June 2010, p. 120.

the staff of the National Office for the Environment”<sup>22</sup>, although they are responsible for the preparation and follow-up of several hundreds of files. In particular “It is important to recognise that this agency has never had to deal with investments of this scale or of such a polluting nature in the past. Do they really have the scientific capacity to evaluate, comment on and follow the environmental impact assessments?”<sup>23</sup> In reality, the measures for environmental protection and the mitigation of the impacts and compensation depend on the initiatives taken by the mining companies, who use their “responsibility” as a core communication tool.

### **Multinationals and public authorities: David and Goliath**

The dialogue between multinationals and the Malagasy authorities is totally asymmetrical. The state authorities have little or no power, particularly in periods of crisis and when international aid has been suspended, and they often appear to merely record the decisions made by the major industrial groups.

In October 2010, a local organisation, a partner of Friends of the Earth, visited the Melaky Regional Office of the Environment and Forestry Authorities (DREF). This office is supposed to control all operations affecting the environment and forestry in the region (39,000 square kilometres, equivalent to the size of the Centre region of France), but the visiting group found that the only member of staff present was a single employee.

In Antananarivo, where the contracts are negotiated and most decisions are taken, the conditions are far from optimal. The National Office for the Environment (ONE), responsible for delivering environmental permits and monitoring projects, is seriously short-staffed and also lacking sufficient funding and equipment, as it is materially dependent on companies in their daily work.<sup>24</sup> So when a decision is made to go and inspect a production site that is difficult to access by road, ONE’s agents borrow helicopters and other vehicles from the major corporations.

“The relationships are negotiated with the organisers, they have ONE in their pocket” confided an ex-staff member of one of the multinationals. And as to the number 4 in the Ministry for the Environment, when interviewed by Friends of the Earth, he underlined the corruption of the whole sector. He admitted that he himself had never managed to gain access to the contracts between the oil industry and the government.<sup>25</sup>

Legislation for the mining and oil industry sectors, aimed at making Madagascar more ‘competitive’, formalises this generalised corruption. For example, Article 222 of the mining laws stipulates “reports and assessments carried out by the relevant bodies shall remain confidential for the duration of the validity of the concession rights. They may be published only once the concession rights have expired”. Extensive use of this article thus enables public bodies and corporations, who are frequently working hand-in-hand, to withhold information.

## **4. Maximum profits for multinationals, minimum profits for Madagascar**

Governments of Madagascar of the last twenty years, supported by the international financial institutions, have made the extractive sector one of the main bases of their economic policy, justifying their choice by the potential positive impacts of the investments made by the mining and oil industries on the fight against poverty. Yet experience shows that peoples’ expectations are rarely met, and the development of the extractive sector can rapidly turn into ‘resource curse’. Exploitation of mineral resources in no way guarantees the optimal use of tax revenue in combating poverty, and is increasingly frequently linked to a rise in corruption. It also leads to serious social and environmental

<sup>22</sup> Ibid, p. 125

<sup>23</sup> Ibid., p. 119.

<sup>24</sup> Interview by Friends of the Earth France with representatives of ONE, October 2011

<sup>25</sup> Juliette Renaud / Friends of the Earth, *Total: une catastrophe annoncée*, Altermondes, 22nd December 2011

dysfunctions that Madagascar then needs to address (c.f. parts II and III hereafter), and strongly compromises their ability to move towards fair and sustainable development aimed at meeting their millennium development goals. World Bank experts themselves admit, “*Madagascar is vulnerable to a resource curse [...] Mining revenues will significantly reshape the intra-elite distribution of rents by creating a valuable prize for those who control political power.*”<sup>26</sup>

Although the international financial institutions emphasise the good public governance of financial resources generated from mining in Madagascar, this is only one of the twin dimensions of the problem of mining-generated revenue. Why do the experts from the World Bank never speak about the transparency of the profits made by transnational companies? In other words, they insist that the meagre financial impacts (mining rights, direct and indirect tax revenue etc) from mining should be shared in a fair manner in Madagascar, without taking the immense profits that the very liberal Malagasy legal system allows multinationals to transfer to countries outside Madagascar.

When documents are available – which is very rare indeed – the financial analysis of oil and mining projects demonstrates that the revenue distribution from the extractive industries is particularly unfavourable to the Madagascar authorities and people, but highly advantageous to the shareholders. The companies themselves boast about the lucrative nature of their activities in Madagascar in the documents aimed at seducing investors, speaking of the highly attractive nature of the Madagascar tax regime.

In Madagascar, as in the other countries of the South, extractive industries' activities are totally geared towards meeting the needs of the North. People in the richest countries consume on average ten times the natural resources of those in the poor countries.<sup>27</sup> But rather than re-examining the unsustainable production and consumption models in order to end over-consumption, the governments of the countries of the North continue to try to meet the demands of their industries and populations, irrespective of the human or ecological costs.

Much public policy favours this sort of resource-grabbing in the South by supporting multinationals rather than the interests of the population in the countries where the resources are extracted. In the European Union, policy is aimed at securing raw materials for the European market, and thus providing European multinationals with access to those natural resources that are concentrated in the countries of the South, such as Madagascar. The European Investment Bank is one of the key strengths of these policies based on the negotiation of trade and investment agreements that are not favourable to the countries of the South. The multinationals exploit the non-renewable resources without paying a fair price for them, and export them to Europe, the United States or the emerging countries, particularly to China, who then massively re-exports manufactured products to the richest countries. By exploiting the natural resources of Madagascar, industrialised countries are aggravating global inequalities and expanding their 'ecological space' to the detriment of the populations and countries of the South.<sup>28</sup>

### **Ambatovy: a highly profitable project**

80% for the shareholders, 20% for Madagascar: that's how the projected share of the revenue from the Ambatovy mining project, a mining complex established in the east of Madagascar, can be summed up. This is a perfect example of the attractiveness of the Madagascar legislation.

<sup>26</sup> World Bank, Madagascar - Review of the governance and development efficiency. Analysis of the political economy of governance in Madagascar. Summary of Report n°54 277-MG, December 2010, p.xiv  
[http://siteresources.worldbank.org/INTMADAGASCAR/INTMADAGASCAR/FRENCH/Resources/ESW\\_Gouvernance.pdf](http://siteresources.worldbank.org/INTMADAGASCAR/INTMADAGASCAR/FRENCH/Resources/ESW_Gouvernance.pdf)

<sup>27</sup> Friends of the Earth Europe, Over-consumption - Our use of the world's natural resources, September 2009

<sup>28</sup> From the individual to the collective, from local to global, the “ecological space” of all must be respected. This implies (1) the minimum required by all people to meet their basic needs, access to air, water, food, energy, housing...as well as healthcare, education, information and culture, (2) the upper limit over which people consume the ecological space of others and that of future generations. For more details on this concept: [www.amisdelaterre.org/Espace-ecologique-et-inegalites.html](http://www.amisdelaterre.org/Espace-ecologique-et-inegalites.html)

These projections are not invented. They are based on the conclusions of external auditors that have certified the quality of the mine and financial models for its operation. They are summarised in a confidential report for the Board of the African Development Bank (ADB).<sup>29</sup>

The ADB experts concluded, "*The financial results of this project were reliable*". The estimated production costs were among the lowest in the world. The total sales figures for nickel, cobalt and ammonium sulphate were estimated to reach 26.7 billion US\$ over the twenty-seven years of projected mining activity. Over this same period, 2.54 billion US\$ would be paid to the Madagascar public authorities in mining rights, local tax and corporate tax as well as tax deducted at source on dividends. The banking consortium that fronted 2 billion US\$ funding for the project will receive 1.5 billion US\$ interest on their loan. But the main winners will be the shareholders, who will receive an estimated 10 billion US\$ in post-tax dividends over the twenty-seven years. The model estimates the yield of the investment at 16.5%.

It is important to underline that these estimates are potentially far below reality, and the difference between the dividends paid to shareholders and tax revenue could in fact be far greater. The analysis is based on very cautious hypotheses, particularly as far as the projected price for cobalt and nickel are concerned. Based on prices for the last five years, the financial return would be far higher.

## 5. The Millennium Development Goals under threat

The development of the extractive industry in Madagascar, a politically unstable country that is particularly coveted for its natural wealth, will not only lead to the destruction of local biodiversity in which the island abounds: it will produce a high level of carbon dioxide emissions. This will lead to Madagascar's efforts to achieve the Millennium Development Goals (MDGs) being seriously compromised.

The importance of Africa as a development partner of the EU was confirmed in the strategic document Europe 2020<sup>30</sup>, as well as the commitment that was made by the EU to "eradicate poverty, promote growth and meet the Millennium Development Goals".<sup>31</sup>

Africa has been recognised as being particularly vulnerable to climate change, which is why the partnership recommends "including the issue of climate change in the development planning for Africa and cooperation between Africa and the EU in the development field". Both European and African political decision-makers must be aware of the risk that oil and mining investments represent in terms of their high carbon intensity in Africa.

The last UN report on the MDGs states that little progress has been achieved on the 7<sup>th</sup> objective on environmental protection, as no efficient measures have yet been taken against the main causes of the loss of biodiversity; these are particularly due to over-consumption, loss of habitats, pollution and climate change.<sup>32</sup> The latter does not only represent a danger for the 7<sup>th</sup> objective, but for the whole of the MDGs.

<sup>29</sup> African Development Bank, Mémorandum au Conseil d'administration – Madagascar, projet d'exploitation de Nickel d'Ambatovy, April 2007, 77 p.

<sup>30</sup> EU, 2010. COM (2010) 2020. Communication by the European Commission 2020 : EUROPE 2020 A strategy for smart, sustainable and inclusive growth 3rd March 2010. p. 24 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC2020:EN:PDF>

<sup>31</sup> Ibid, p. 24.

<sup>32</sup> United Nations 2010. Keeping the promise: a forward-looking review to promote an agreed action agenda to achieve the Millennium Development Goals by 2015, Report of the Secretary-General, A/64/665, (<http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N10/238/02/PDF/N1023802.pdf?OpenElement>).

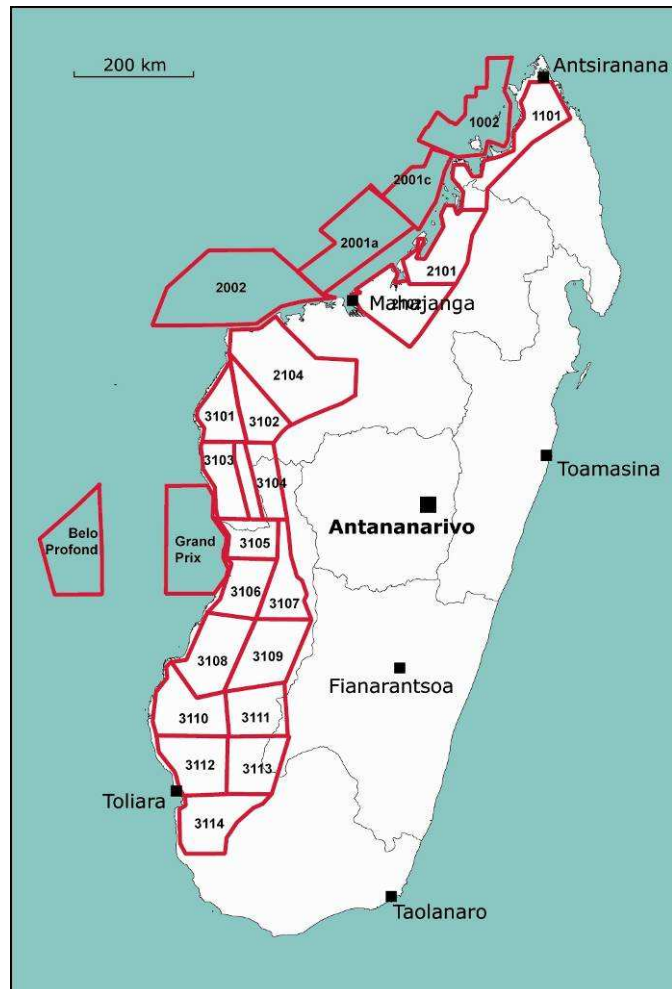
## II. MADAGASCAR: PUSHING THE LIMITS OF OIL EXTRACTION?

*Oil concessions in Madagascar, 2012*

For over a century, the oil companies, political authorities and scientific community have been exploring for black gold in Madagascar. Although the first traces of oil were found at the end of the 19th century, exploration has since taken several different paths, from off-shore prospecting for liquid oil to on-shore exploration of unconventional oil (tar sands, heavy oil etc.). These efforts have been disappointing to date: although they have indeed proven the existence of oil, the size of the finds and the cost of extraction have shown it would not have been profitable to exploit. But this could change: the huge increase in the price of oil, and technological innovation, are encouraging companies to explore new oil fields, and could lead to Madagascar becoming an oil-producing region in the future.

### 1. Oil companies assailing Madagascar

In Africa, the major oil and gas companies have for many years concentrated their prospecting efforts on the north of the continent and in the Gulf of Guinea. The increase in price of petroleum-based products, the end of the reserves in the major production areas, and some spectacular new finds have been whetting the appetites of the major players in the oil industry for the east African coastal areas.



Madagascar is seen as a new frontier in oil prospecting. Approximately fifteen companies are now exploring 24 different concessions, of which 18 are on-shore, and 6 are offshore.<sup>33</sup>

### The arrival of Chinese oil companies

On October 20th 2009 Hong Kong's Sino Union Energy Investment Group Limited (Sunpec) announced the discovery of on-shore oil in their 3113 block, in the south of Madagascar. According to estimates, this field is supposed to contain 270 million tonnes of crude oil (of which 1.8 million barrels can be exploited). Sunpec was acquired in June 2011 by the Yanchang Petroleum Group (owned by the Chinese province of Shaanxi). But this acquisition appears not to have been welcomed by the Madagascar authorities, who apparently were on very good terms with Sunpec's management. And there is a reason for this: in 2009, several months after President Ravalomanana had been overthrown, Hui Chi Ming, the ex-leader of the company, had employed a key 'special advisor': Yves Roger Rajoelina, father of Andry Rajoelina, the current head of state.<sup>34</sup>

<sup>33</sup> OMNIS, *Les activités pétrolières à Madagascar*, This document was presented at the journée du pétrole amont 2012, 26th September 2009.

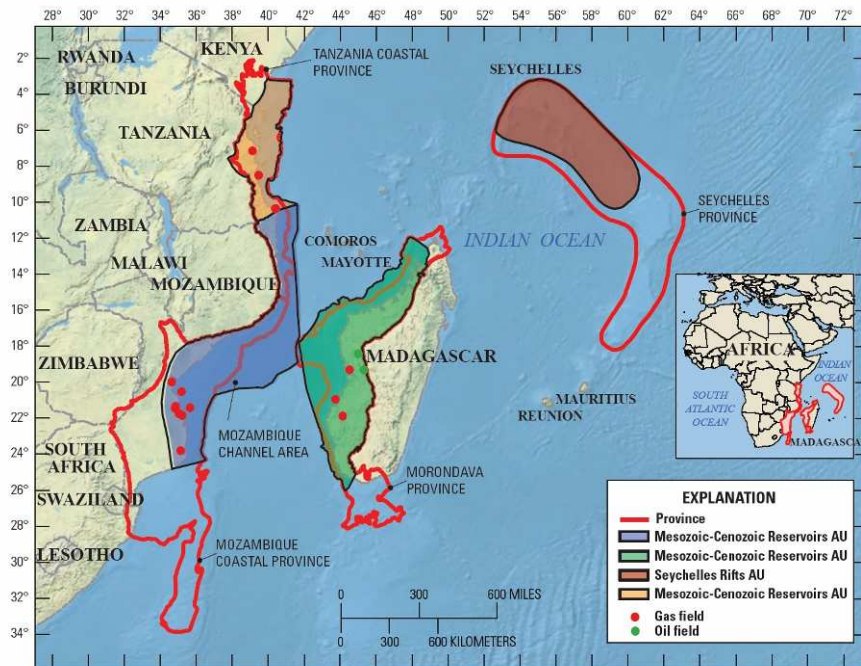
<sup>34</sup> "Hui a roadblock for Sunpec", Africa Energy Intelligence, 27th July 2012.

<http://www.africaintelligence.com/AEM/government-strategies/2012/07/25/hui-a-roadblock-for-sunpec,104935638-BRE>

Madagascar thus finds itself facing two distinct limitations:

- A technological (and financial) limitation, because exploiting 'unconventional' oil in the west of Madagascar may well prove profitable in the reasonably short term.
- A geographical (and political) limitation, as the western coasts of Madagascar that border the Mozambique canal are considered by some to be the new energy Eldorado, since the recent discovery of important gas reserves off the east African coast, but where the ownership of certain of these off-shore reserves are the subject of geopolitical dispute.

*Mozambique Canal - "Assessment of Undiscovered Oil and Gas Resources of Four East Africa Geologic Provinces"*



Source : USGS, April 2012

### 'Conventional' and "unconventional' oil?

Production of oil from so-called 'unconventional' oil sources, i.e. oil that is not relatively easy and cheap to exploit, is of great interest to oil companies. They say that this will enable them to face the challenges that they believe it is their duty to overcome: the explosion of global demand for fossil fuel, securing energy supplies, the increasing scarcity of conventional reserves, and the development of 'nationalism of resources' in the countries of the South, etc.

Given this context, and the explosion of the price of oil, exploration and exploitation of new forms of fossil fuel, or, to be more precise, of new techniques that would enable the exploitation of hitherto unprofitable oil reserves, have been developed. This is particularly true for tar sands, shale oil and tar shale, extra-heavy and all other kinds of oil that are more viscous, due to being mixed with other matter (clay, sand, water etc). Extracting and refining them therefore require more sophisticated and more expensive techniques than those used for conventional oil. Certain oil that is exploited in extreme conditions (deep-sea, polar regions etc) is sometimes classified as 'marginal oil', although the techniques used are relatively 'classical'.

Whatever the enthusiasm expressed by the oil industry, these products are *marginal* in terms of their short-term profitability, and will only be able to *marginally* affect the inevitable approach of the long-term global depletion of natural resources. They do not meet any of

today's energy challenges and are merely a stopgap to hold off the energy transition that society will inevitably have to confront. Indeed, if we wish to limit global warming to 2°C, we need to leave between 75% and 80% of existing fossil fuel reserves in the soil.

## 2. Unconventional oil and its dramatic social and environmental impacts

### *Tar sands exploitation in Alberta (Canada)*



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Unconventional oil in no way enables us to confront the energy challenges now facing the planet; nor does it take ecological limits into account. Due to the specific conditions involved in exploiting unconventional oil, it has a considerable human, social and environmental cost and its damaging impacts are far greater than those of conventional oil.

This is particularly true of tar sands. They are one of the dirtiest kinds of oil ever to have been exploited on Earth. Depending on the depth of the oil, the exploitation is carried out either by mining (open-cast mines) or by injecting high-pressure hot water underground ('in situ'). As well as destroying the landscape, tar sand production uses a great deal of water: it takes three to five cubic meters of water to produce just one cubic meter of oil. Once used, the water and the toxic mud are stocked in tailings ponds, contaminating ground water.

This industry also consumes a great deal of energy and pollutes heavily. It uses four times as much energy as is used for producing conventional oil, and it emits three to five times more greenhouse gas. In a nutshell, the exploitation of tar sands is an ecological disaster, as well as being highly damaging to both health and the climate.<sup>35</sup>

In order to grasp the scale of the dangers involved in tar sands extraction, we need to look at the case of Alberta, in Canada. With 173 billion barrels of potentially exploitable oil, lying in the biggest carbon sink of our planet (the boreal forest), this region has the biggest reserve of tar sands in the world. It

<sup>35</sup> For further information, read the report by Friends of the Earth Europe, "Tar Sands – Fuelling the climate crisis, undermining EU energy security and damaging development objectives" May 2010.

has become the new 'Eldorado' of the oil companies, while posing significant problems for local communities and the environment. Landscapes have been devastated, the air, earth and ground water are contaminated, there are an increasing number of cases of cancer caused by the huge increase in toxic substances present (mercury, arsenic, and other heavy metals), urban sprawl and increased cost of living, not to mention the destruction of traditional lifestyle of the First Peoples living downstream from the projects. In 2009, a scientific team revealed "*due to the release of Polycyclic Aromatic Hydrocarbons (PAHs) into the atmosphere, the (oil) industry was causing the equivalent of a major oil spill every year.*"<sup>36</sup>

### **New regulations under threat from the lobbies**

In 2008, under the French Presidency, the European Union proposed a revision of the Fuel Quality Directive. Article 7a of the proposed revision aims to oblige transport fuel suppliers to reduce lifecycle greenhouse gas emissions from transport fuel by 6% by 2020.

Three years later, in October 2011 the European Commission issued a proposal for the implementation of Article 7a of the proposed directive that included a specific GHG value for oil deriving from tar sands – 107 g CO<sub>2</sub>/MJ. A dedicated Fuel Quality Committee consisting of representatives of the EU Member States voted on this proposal in February 2012. The vote resulted in a stalemate, which meant that according to the EU procedures the decision on the proposal was next supposed to be made by the EU Environmental Council.

However, as a result of oil industry and Canadian government pressure on the European Institutions and on the EU member states, fearing that other countries might adopt similar legislative measures preventing further development of unconventional fossil fuels, the vote of the European Council has been delayed as requests were made for further studies on the impact of the directive. The proposal was sent back to the Commission, with a request to prepare a full impact assessment of the proposed measure. The process is expected to be completed by the end of 2012. However, there is a risk that the proposal or its parts could be changed. Four years since the proposal was issued, this law has still not been implemented.

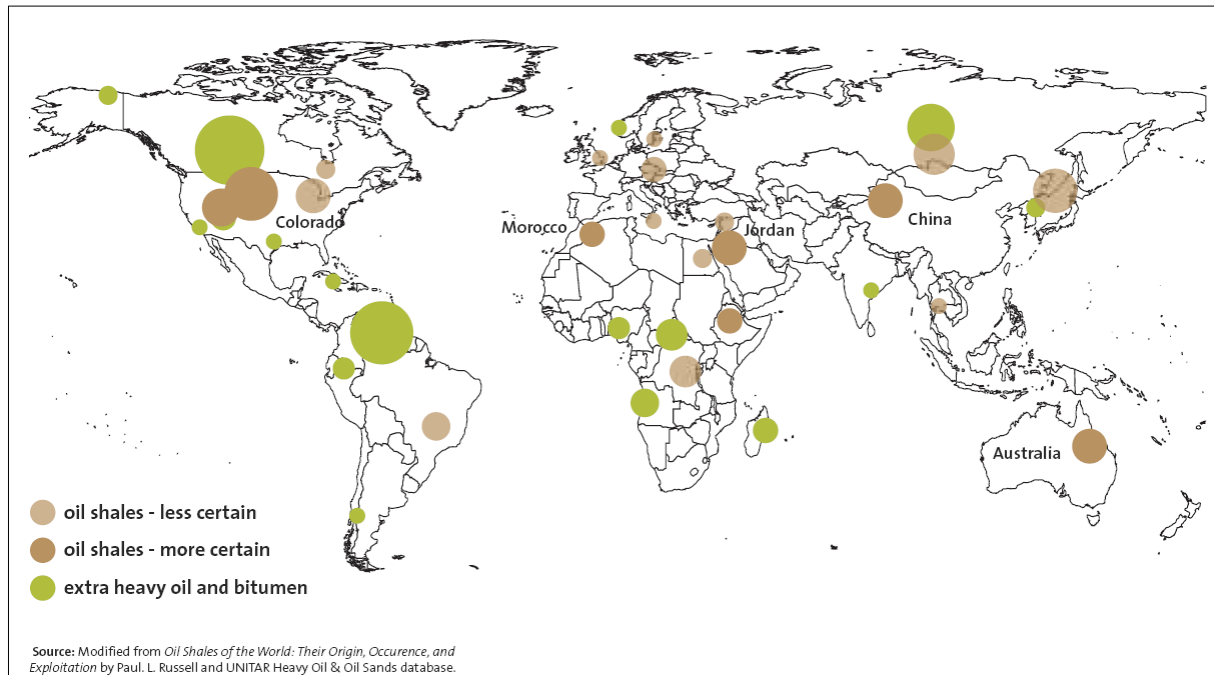
Although Alberta, along with the Orinoco River Basin in Venezuela, is home to the main global reserves of tar sands (as such, they have become the emblematic site for their exploitation), other regions are being targeted for the production of unconventional oil.

This is particularly true for Sub-Saharan Africa, where several regions are at risk of being affected by this new black gold rush in the near future. Although the main projects are still in the exploratory phase, it is already possible to foresee the damage that this would cause to some of the poorest places on Earth.

<sup>36</sup>

Emmanuel Raoul, *Sous les sables bitumineux de l'Alberta*, Le Monde diplomatique, April 2010.

### Global reserves of unconventional oil, 2010



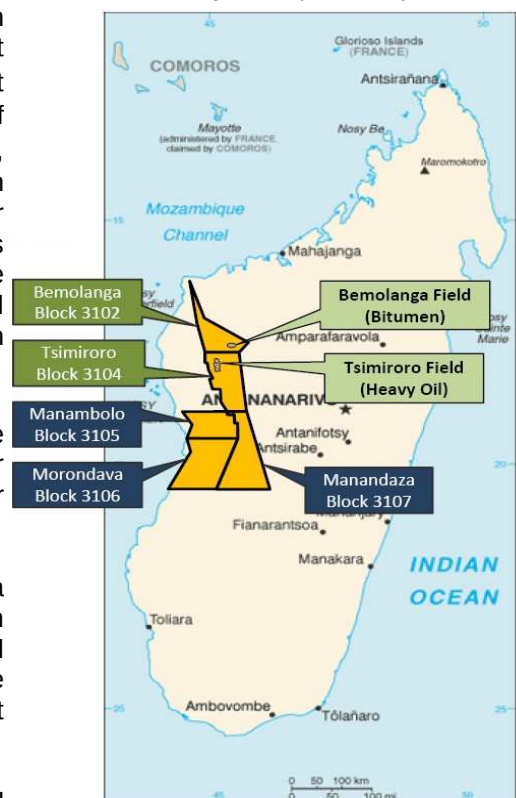
### 3. Oil in Madagascar, minor and major interests (the case of Madagascar Oil and Total)

Source : Madagascar Oil -  
Management update - May 14th 2012<sup>37</sup>

One of the companies that have recently been established on Madagascar is Madagascar Oil. It is not because of its 'local' name and 'nature-friendly' policy – it has adopted and uses the lemur, the symbol of Madagascar as its logo – that this small company, domiciled in Bermuda but with headquarters in Houston (USA), has attracted the interest of observers. It is rather because this 'minor' was granted shared production rights in April 2004, with highly favourable conditions to explore and exploit two unconventional oil sites that have until now been considered as the most promising on Madagascar: Bemolanga and Tsimiroro.<sup>38</sup>

Both are classified as 'unconventional' oilfields, and are situated on either side of the administrative border between the Melaky and Menabe regions. The sites differ in the following ways:

- The Bemolanga field (in the Melaky region) is a tar sands site. It covers an area of 5,463 km<sup>2</sup>, with a mining perimeter of 424 km<sup>2</sup>, and could produce as much as 1.2 billion barrels of oil. The average depth of the field is only 15 metres, and it would involve opencast exploitation.
- The Tsimiroro field (that is astride the Melaky and



<sup>37</sup> Madagascar Oil has obtained explorations and development rights on 6 onshore blocks, representing a total of 58.455 km<sup>2</sup>. It retrocedes its rights on block 2103 in 2009

<sup>38</sup> Norbert Rabe, *A review of exploration for non conventional hydrocarbon resources in Madagascar, 2008* (<http://magpetroleumgas-norabe.com/>).

Menabe regions) is a heavy oil project. It covers an area of 6,670 km<sup>2</sup> and would have a perimeter of 1,600 km<sup>2</sup> and is said to contain 1.7 billion barrels of oil (with an estimated possible extraction of 1.1 billion barrels).<sup>39</sup> The depth of the field varies between 40 and 300 metres underground, and exploitation would involve steam injection in situ.<sup>40</sup>

As Madagascar Oil is a small company and has limited capital, they soon started looking for technical and financial partners to carry out their exploration. These partners were all the more necessary as the contracts that they had signed with OMNIS required that they carry out genuine exploration in the designated blocks.<sup>41</sup>

This led to company becoming partners with Total in 2008; the latter were very interested in developing unconventional oil. The French super-company acquired a 60% share in the Bemolanga block for an investment of 100 million US\$. As operators of the block, Total immediately declared their intention to “*launch mining production by 2020 of a potential 200,000 barrels/day*”.<sup>42</sup> Studies carried out in the zone between 2008 and 2011 apparently failed to yield the expected results in terms of profitability for production of oil from tar sands at current oil prices.

The French multinational does not however appear to have given up on their hopes for Bemolanga: their contract with the Madagascar State has been amended and extended on two occasions, in June 2011 and June 2012, to enable it to study the potential of the zone for conventional oil (surface, aeromagnetic and seismic acquisition exploration is in progress).<sup>43</sup> When questioned as to their intentions in Madagascar, a representative of Total in Paris recently told Friends of the Earth “*The government of Madagascar is putting pressure on the oil companies to find oil*”. One wonders whether the extension of the license didn’t give Total the means to make their exploitation of tar sands profitable. Or perhaps they are keeping this license for purely speculative reasons: oil companies are increasingly dependent on financial markets, and the value of their share quotations on the stock exchange is strongly linked to the size of their reserves, considered to be the guarantee of their future profits.

Without any partner(s), Madagascar Oil would remain the only operator in Tsimiroro. In recent months the company has been multiplying its optimistic declarations to investors and the local press in Madagascar on the up-coming exploitation of this heavy oil field.<sup>44</sup> A pilot project using steam injection is supposed to be starting work in the last quarter of 2012, with full production announced for 2018. This field is “a world class resource”, and the exploitation is expected to last for over fifty years and to produce up to 300,000 barrels of heavy oil per day, according to the proud boasts of the company’s documentation.<sup>45</sup> In July 2012, the company even opened their installations to the local press. “*It is still unconfirmed, but we really believe in it,*” said Emma Ralijhon, the Deputy General Manager of Madagascar Oil.<sup>46</sup>

In spite of these signs of optimism, there is some scepticism around Madagascar Oil. The promises made, the size of the reserves and the timeline for operations have all varied considerably since Madagascar Oil began operating in 2004. This analysis is shared by the consultant Lalanirina Rasoanandrianina, who is a Malagasy specialist in oil, and who described the context in July 2012 as follows: “*Nobody can pretend to date to talk about extraction and exploitation of oil in Madagascar. And if we do speak about it, it is merely a strategy to achieve high quotations on the stock exchange*”<sup>47</sup>.

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<sup>39</sup> According to studies carried out in September 2011 by Netherland, Sewell & Associates, Inc. (NSAI) for Madagascar Oil (Madagascar Oil - Management Update – 14th May 2012).

<sup>40</sup> Madagascar Oil, *Tsimiroro - Block 3104*, <http://www.madagascaroil.com/block-3104.php> – consulted on the 30<sup>th</sup> October 2012.

<sup>41</sup> *Madagascar Oil in Dire Need of Partners – Antananarivo, Africa Energy Intelligence*, 10th November 2010

<sup>42</sup> Presentation of « heavy oil » on the Total website: <http://www.total.com/en/our-energies/oil/exploration-and-production/our-skills-and-expertise/heavy-oil-940841.html>

<sup>43</sup> Madagascar Oil - Management Update – 14th May 2012, p. 26.

<sup>44</sup> Selected reading: *Pétrole de Tsimiroro - Le pays sera parmi les premiers fournisseurs mondiaux*, Midi Madagasikara, 19th September 2011.

<sup>45</sup> Madagascar Oil - Management Update – 14<sup>th</sup> May 2012, p. 14-18.

<sup>46</sup> Madagascar Oil: *Démarrage des travaux pour le stockage de 180 000 barils de pétrole*, Midi Madagasikara, 6th July 2012.

<sup>47</sup> Quoted in *Hydrocarbures: Madagascar, la nouvelle frontière pétrolière*, Les Nouvelles, 2nd July 2012.

## Total and tar sands

Total is the fifth-largest oil company in the world. The group has shown an insatiable appetite for tar sands, the dirtiest and most costly oil there is. *"The qualities of underground extra-heavy oil and bitumen is estimated at between 2,600 and 3,800 billion barrels"*, stated the company enthusiastically on their web site, *"Extracting this oil represents a considerable challenge: they represent between 500 and 1,000 billion barrels of potential reserves, approximately 25% of the global oil reserves of conventional crude oil."*<sup>48</sup>

Ultimately, the company would like to see tar sands account for 10% of its current production, and is investing heavily in Canada. In Alberta, Total is already involved in a partnership with ConocoPhillips, in the exploitation of tar sands in Surmont, where the production was 27,000 barrels per day in June 2012.<sup>49</sup> Having invested in different tar sands projects that are in progress, (Joslyn, Fort Hills, Northern Lights), the Total subsidiary, E&P Canada is hoping to produce some 200,000 barrels per day by 2020.<sup>50</sup> It is the same perspective of increasing tar sand oil production that has led Total to take an interest in Madagascar.

It will come as no surprise that the company is promising to make all possible efforts to exploit tar sands in an environmentally respectful manner. Recognising – at least partially – the inherent risks of this activity, the company literature is full of consideration for the responsibility of Total and the environmental challenges that they intend to take up. But this self-promotion is hardly convincing. Most of the so-called company commitments are just vague promises that are lacking in any kind of substance and refer to a vague future.<sup>51</sup> They limit themselves to showcasing a few 'pilot schemes' and other 'radically innovative procedures' (reforestation, water recycling, etc); the communication in no way undermines the idea of exploiting tar sands. In other words, Total is swearing that they will produce 'clean' dirty oil.

## 4. Vulnerable populations, poor corporate practice

*Ambonara village, close to Bemolanga exploitation site*

© Juliette Renaud

The question isn't so much *if* Madagascar will one day become an oil-producing country, but rather *when*. As the price of oil will continue to increase in years to come, this outcome appears to be increasingly inevitable – which leads to serious concern. Given the poverty and the democratic failures from which the country is suffering, will the people of Madagascar succeed in preparing for the real arrival of the oil industry? This appears rather unlikely, given the level of existing social and environmental issues that are already appearing in the regions where the exploration is now under way...



As Friends of the Earth Europe and Friends of the Earth France noted during their field visits to Madagascar in April and October 2011, one of the main problems is the lack of readily available, comprehensible information for local people. Most

<sup>48</sup> <http://www.total.com/en/our-energies/oil/exploration-and-production/our-skills-and-expertise/heavy-oil-940841.html>

<sup>49</sup> Total E&P Canada, *Surmont Asset*, <http://www.total-ep-canada.com/upstream/surmont.asp>, consulted 30th October 2012.

<sup>50</sup> TEPCA Site: [http://www.total-ep-canada.com/publications/speeches\\_presentations/documents/TD-Newcrest%20Keynote-2011.pdf](http://www.total-ep-canada.com/publications/speeches_presentations/documents/TD-Newcrest%20Keynote-2011.pdf)

<sup>51</sup> C.f. Total: a responsible production (<http://www.total.com/en/special-reports/oil-sands/total-responsible-production-200937.html>)

people are illiterate, and the rural population of Bemolanga or Tsimiroro have difficulty in understanding the companies' intentions and the dangers that lie ahead for them and their ecosystems. They also have difficulty in understanding and defending their rights.

The companies present in this area, Total and Madagascar Oil, are making little real effort to become close to the local population. As often as not, they hold token public meetings where they limit themselves to presenting excessively technical projects without any critical feedback, all with the complicity of the authorities. These meetings take place in the provincial or district capitals that are often very distant from the villages that will be directly impacted. Furthermore, the documents on the projects, and sometimes even on the consultations themselves, are not translated into the Malagasy language, although only a handful of the inhabitants in the affected villages can speak French.

Given these circumstances, it hardly comes as a surprise that the 'social responsibility' expenditure that companies are legally obliged to undertake during the exploratory phase of oil prospecting is so poorly assigned. An illustration of this is that of Total's social responsibility fund of 8 million US\$ in the Bemolanga region.<sup>52</sup> In the Morafenobe district, the local development plan that was used as a basis for 'social investments' by Total was not designed by the local community, but by a consultancy firm, paid out of the social budget of the project.<sup>53</sup> The interviews carried out in various villages by the Friends of the Earth and their partners showed that these investments fail to meet the needs of the local population:

- Roads built were essentially of benefit to Total: they stop at the industrial site
- The bridge that was built between Morafenobe and Bemolanga does not meet local peoples' needs. Village people complain that it was built on the outskirts of the village, and not where there is most traffic. They therefore continue in their old ways, walking or taking a boat to cross the Manambaho River. This bridge can only be partially used in the rainy season.
- As to the "guest-house" built in the hamlet of Amboanara, local people are perplexed. When Friends of the Earth last paid a visit, they realised that people are still unsure of the future use of the building. One thing is certain, is that since being built, this building has remained empty and locked, and of no use to the local village inhabitants.
- Finally, only the local village hall built in Morafenobe appears to have been of any genuine social use (holding village gatherings etc).

According to the observations of Friends of the Earth in April and October 2011, and the testimonials gathered, it appears that the oil companies favour investing in visible projects. They prefer to fund projects with big budgets that enable large sums of money to be spent in a rapidly and concentrated manner, such as renovating roads. Conversely, the multinationals do not favour spending money on less tangible things that would still prove useful, such as capacity-building programmes for local people. Projects of this manner take more time to show results, and are more difficult to measure. It appears that Total did not spend time on adopting a more participatory approach to define what the genuine needs of the communities might be.

The Total workers at the Bemolanga site were essentially employed by sub-contractors. Henri Fraise was responsible for the work related to camp maintenance, Colas for the renovation of roads, and New Rest for catering and laundry. According to the testimonials provided by these employees to a local partner of Friends of the Earth in 2010, the work conditions of New Rest were the worst: mediocre pay, excessive hours, no social protection. Once again, the argument of job-creation put forward by the multinational has shown its limits.

If local communities find it so difficult to make their voice heard, it is also because local and national authorities do not make much effort to defend them. Without always knowing the exact reasons, the village or regional authorities are sometimes excessively in favour of the installation of oil companies and trust in the promises that are made to them.

Friends of the Earth met with the president of the Morafenobe district, he believes that the future potential exploitation of tar sands in Bemolanga will change his town into a small paradise, with good roads, modern hospitals and even a university. This hope is nurtured by current frustrations: until now,

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<sup>52</sup> According to the figures published by Total in a reply to a letter from Friends of the Earth 8th December 2011.

<sup>53</sup> Interview by Friends of the Earth France with the district representative of Morafenobe, October 2011.

the village has only had limited access to water and electricity, and is still waiting for a secondary school to be built. Some local leaders are very hopeful, and all too often perceive those defending the environment and local communities as troublemakers, opposed to the miraculous development that the authorities and companies are leading them to believe possible. Friends of the Earth had planned to hold a meeting to inform people in the small village of Adkondromena, near Tsimiroro, but the village mayor was strongly against this, and explained that they should first get permission from Madagascar Oil, as he was afraid that an initiative of this kind would compromise the good relationship that they had built with the company.

Local people rarely dare to complain, for fear of reprisals, and the authorities do not protect them. They thus find themselves face-to-face with the multinationals that regularly try to gag or control any opposition from civil society.

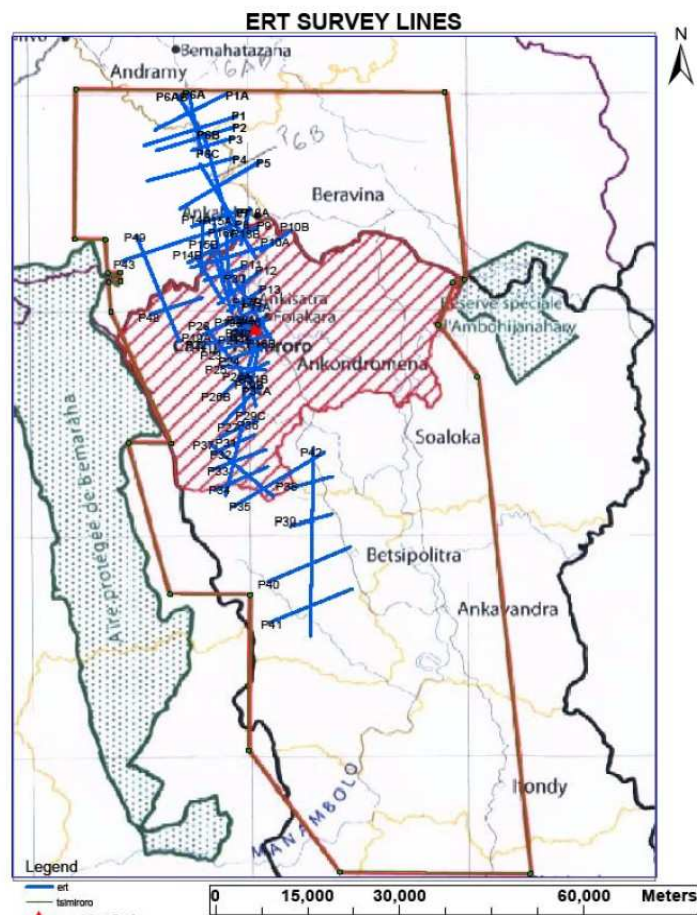
## 5. An inevitable environmental catastrophe?

The ecosystem of the border region between the regions of Melaky and Menabe is particularly fragile. The impacts on the environment would be dramatic if the unconventional oil of this region were to be exploited.

*Tsimiroro Project, close to the protected area of Bemaraha*  
Source: Madagascar Oil, presentation of Tsimiroro heavy oil project, May 2010

The first concern is that of the nature parks. The Tsimiroro and Bemolanga oil fields are very close to the protected areas of Bemaraha and Ambohitranahary. Tsingy de Bemaraha national park appears to be most under threat. It covers a surface area of 1,520 km<sup>2</sup>, and is the largest protected site in Madagascar. It has been a designated UNESCO World Heritage site since 1990 due to the exceptional karst landscape of limestone rock, virgin forests, and its swamps and mangroves full of rare animals. In spite of this wealth, the Tsingy de Bemaraha reserve is poorly supervised or marked. An oil complex could well be built just on the edge. And the only planned measure of protection in the specifications of the Tsimiroro project is to insist that oil activity take place at least 2.5 kilometres from Tsingy. This is a derisory distance, given the impacts of projects of this kind.

In the extension of Tsingy de Bemaraha, to the North, is Tsingy de Beankà, home to equally rich biodiversity; it is close to the Bemolanga site. With these protected zones lying between the oilfields and the Western coastal area of Madagascar, where would the Madagascar Oil and Total pipelines be situated? These companies are already planning to export the oil produced by sea from the port of Maintirano.<sup>54</sup>



The second issue is that of water management. Madagascar is characterised by extremely important variations in rainfall. The very dry seasons can last up to eight months, and heavy rainfall makes it

<sup>54</sup>

Tsimiroro: Une production de 1000 barils de pétrole par jour en 2013, Midi Madagasikara, 4th July 2012.

very difficult or even impossible to access some regions in the rainy season. Opencast mining for tar sands requires considerable amounts of water, and the impact on local resources would therefore be very significant. It would probably lead to streams drying up during the dry season, and especially to the contamination of the water table and the Manambaho River, the only major waterway that flows through most of the villages in the Melaky region.

The consequences of water pollution of this kind would be catastrophic for local populations. Their main livelihood is based on herding, fishing and gathering, and they would instantly be affected by any scarcity or pollution of existing water supplies. The modification of the hydrological balance would have a particularly high impact on cattle herding, as extensive zebu farming is one of the core activities in this region. Furthermore, the exploitation of tar sands in Bemolanga would be situated in the grazing land now used by local communities, and would destroy the land.

The installation of huge industrial complexes in these sparsely populated rural areas (2-3 inhabitants per square kilometre) would radically change the population balance. This is already visible on a small scale in the exploratory phase, and economic and social conflicts caused by influx of new inhabitants could cause irrevocable damage (significant increases in the cost of living, prostitution, insecurity, trafficking etc).

## 6. Towards offshore exploitation?

Oil companies have been wondering about the potential offshore oil reserves off the coast of Madagascar for several decades. And whereas giant reserves of gas and oil are already being exploited off the East African coast (Kenya, Mozambique, Tanzania), and the techniques for deep-water exploration and exploitation are being perfected, their interest has become keener in the Mozambique Canal.

The Mozambique Canal is still far from becoming the “*new Saudi Arabia*” announced by some professionals.<sup>55</sup> Licenses have only been granted for 6 of the 228 blocks that lie offshore from Madagascar, (compared with 18 out of the 21 on-shore ones).<sup>56</sup> But the oil companies appear to be positioning themselves. They had ceased all their activities following the overthrow of the Ravalomanana regime in 2009.

Although the technical (and financial) obstacles are being overcome in terms of exploring and exploiting deep-water oil reserves, it is the political borders involved in this black gold rush in the Mozambique Canal that are the most likely to have an impact. The Exclusive Economic Zones (EEZs) that determine economic sovereignty over marine areas in accordance with international conventions are actually quite contentious.

One of the most noteworthy issues in the Mozambique Canal, over which France and Madagascar have been in conflict, concerns the Juan de Nova island, situated 150 kilometres off the west coast of Madagascar. It is one of the Îles Éparses, a group of French islands situated in the Mozambique Canal. This tiny island of 5 square kilometres allows France to have control of a huge maritime zone and the equally huge oil reserve that it contains!<sup>57</sup>

These geopolitical and energy interests hide the fact that local communities and coastal marine ecosystems are at risk in the short term, and run the risk of being seriously and permanently impacted by any potential exploitation of the oil and gas reserves of the Mozambique Canal. According to a report published by the French Senate (that curiously fails to make any mention of the potential oil reserves in this zone, although the French authorities had just granted five permits to explore for oil in the EEZ of Juan de Nova<sup>58</sup>), the Îles Éparses are considered as “*indispensable reproduction sites for over 3 million birds of 26 different species as well as 15,000 marine turtles*”. They provide “*unique scientific research potential*” and are “*a privileged site for the observation of global change in a tropical*

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<sup>55</sup> Cinq compagnies vont prospecter une zone française de l'océan Indien, Les Echos, 9th January 2009

<sup>56</sup> OMNIS, *Op. cit.*, 2012.

<sup>57</sup> C.f. the work of the independent researcher Patrick Rakotomalala: *Juan de Nova, du gaz dans l'eau entre la France et Madagascar*, madagoravox.wordpress.com, 27th March 2012 and *Juan de Nova, Oil and Gas (bad) story (parts 1 & 2)*, madagoravox.wordpress.com, 5th and 6th August 2012.

<sup>58</sup> Cinq compagnies vont prospecter une zone française de l'océan Indien, Les Echos, 9th January 2009.

environment.”<sup>59</sup> What would the value of this exceptional ecosystem be in years to come for the oil giants such as Exxon or Total, who are currently prepared to spend millions of dollars to gain access to the zone?

*Pollution in the Gulf of Mexico after the explosion of the Deepwater Horizon platform in May 2010*



© Green Fire productions

From the Gulf of Mexico – BP and the oil spill of Deepwater Horizon – to the Gulf of Guinea and the North Sea (particularly the recent oil spills of the Total Elgin platform), recurrent catastrophes have been associated with deep-sea off-shore oil production. This should incite us to be all the more wary of what is happening in the Madagascar coastal regions.

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<sup>59</sup> Quoted by Agnès Joignerez, *Pétrole ou biodiversité? Géostratégie de la France dans le Canal du Mozambique*, Madagascar-Tribune.com, 23rd August 2012 (Senate report: Rapport d'information n° 299 recorded in the Présidence du Sénat on 17th February 2010, on the îles Éparses, by Mr. Christian Cointat, Senator.)

### III. WHEN MADAGASCAR FALLS INTO THE HANDS OF THE MINING INDUSTRY

#### 1. The human and ecological cost of big mining projects

*Workers in a mine in Kailo (Democratic Republic of Congo)*



© Julien Harneis

Although the mining industry is highly profitable for foreign multinationals, the benefits and profits for local communities in the host countries are miniscule at best. The social and environmental impacts of major mining projects are considerable.

The mining and refining zones are extensively cleared, and huge quantities of matter and earth displaced to extract the minerals. The ecosystems and living conditions of the local communities are directly affected. Mining also generally consumes huge quantities of water to separate the minerals and metal that can be sold from the sand or rock in which they are contained, or during the refining process. It is also an industry that consumes a lot of energy, which aggravates climate change. The mining industry also uses a lot of chemicals for both extracting and refining purposes (sulphuric acid, cyanide and so on). This implies a high level of risk in terms of air, surface- and ground-water pollution, leading in turn to health problems, (cancer of the respiratory system, skin diseases etc.). People who live in the area of the mines are displaced, and have to abandon their traditional economic activities, such as agriculture, without the new mine being able to provide the equivalent of the jobs lost.

Mining projects are generally isolated 'production islands', without any connection to the rest of the economy (imported equipment, lack of any technology transfer, products exported without refining, repatriation of profits). These islands encourage external integration with the global economy to the detriment of internal integration and sustainable local development.

The first victims of these impacts are local communities, and the impacts are often irreversible. These communities are often reticent about the implantation of mining multinationals on their land: social conflicts and repression can cost lives, as is the case in Latin America, Asia and Africa with increasing frequency.

## Employment and the mining sector

Job creation is frequently the main argument put forward by mining companies and the authorities to convince local communities to accept project development. But the extractive industry is capital intensive, with little job creation, unlike the informal or artisanal mines that have employed up to 500,000 artisanal or seasonal workers in Madagascar.

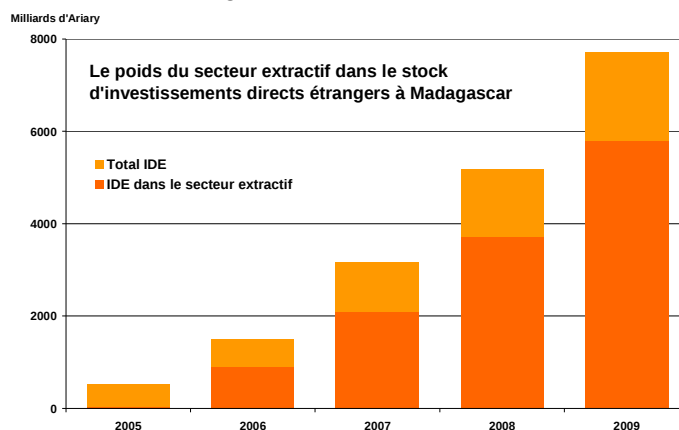
Few permanent jobs are created in major mining projects, compared with the sums invested, and they involve essentially unqualified labour. The ilmenite mine owned by QMM/Rio Tinto (c.f. case study hereafter), for example only employed 1,306 people in 2011, 646 of which were subcontracted labour<sup>60</sup>, for a total investment of approximately one billion US\$.

The construction phase of a mining project involves more labour, but involves mainly short-term contracts involving a high level of migratory labour that destabilises the local socio-economic framework. The Ambatovy project (a 5.5 billion US\$ investment, c.f. case study hereafter) claims to have created over 18,000 jobs in December 2010 (6,426 of these were expatriate jobs, and a high proportion of others were sub-contracted). But the length of these contracts was not stated. When construction ended in 2011, the company only planned to maintain a labour force of 2,500 people on the refining sites, as well as 3,500 people contracted in during the production phase.<sup>61</sup> Once 'demobilised', the construction workers cannot be absorbed by the local economy, and there is an increase in social conflicts.

## 2. The Madagascar mine-rush

Following legislative reforms that were particularly favourable to mining companies, and the political crisis of 2002, investments in the mining and oil sector increased sharply in Madagascar. Stock in foreign direct investments (FDI) in the extractive sector (mining in particular) was in excess of 47 billion Ariary in 2005, and 5,800 billion Ariary in 2009, accounting for 75% of the total FDI for that year.

*Increase in mining investments between 2005 and 2009*



Source: Survey FDI 1<sup>st</sup> semester 2010, Madagascar Central Bank and National Office of Statistics

Two mining projects of global dimensions have largely contributed to this rapid growth:

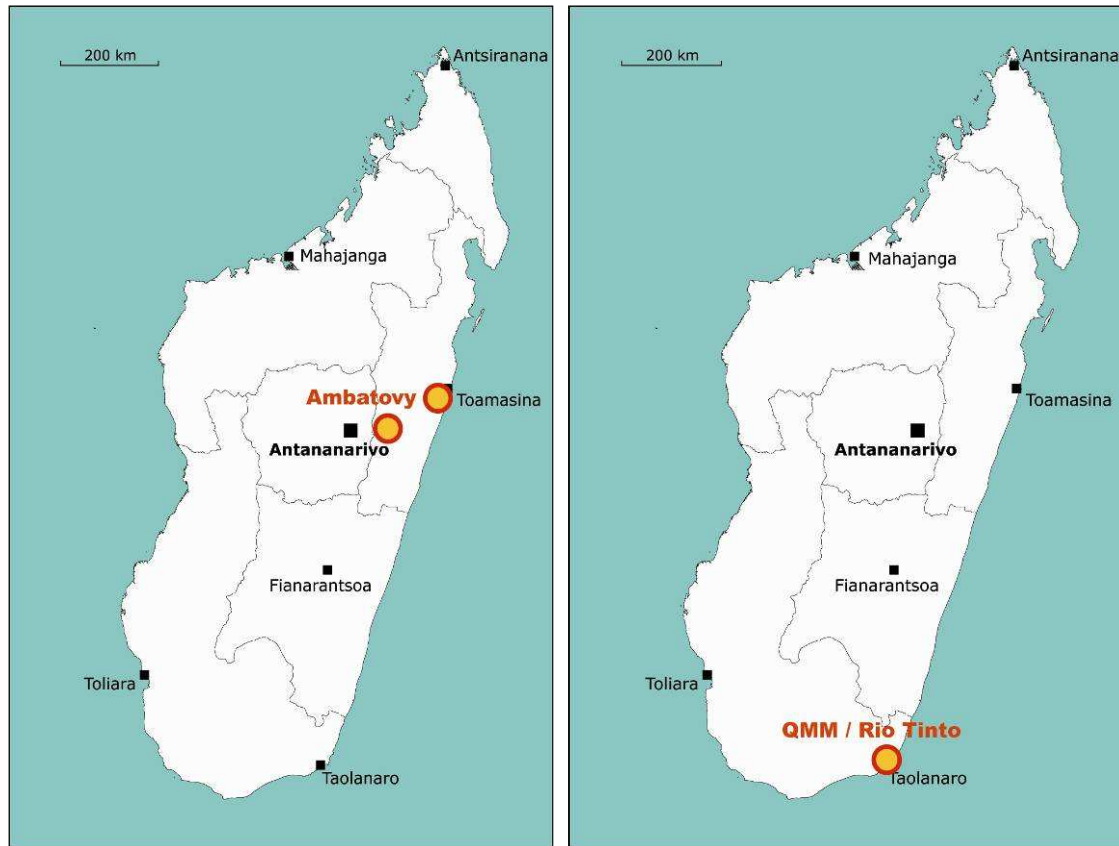
- The ilmenite (titanium) mine owned by **QMM/Rio Tinto** in the region of Anosy (South-East), that began production in March 2009, with an investment of approximately 960 million US\$.

<sup>60</sup> Rio Tinto / QIT Madagascar Minerals SA, *Développement durable: rapport 2011*, p. 10 ([http://www.riotintomadagascar.com/pdf/RDD\\_2011\\_FR.pdf](http://www.riotintomadagascar.com/pdf/RDD_2011_FR.pdf)).

<sup>61</sup> Ambatovy, Sustainable development report 2010, p. 45.

- The **Ambatovy project** of nickel-cobalt mines in the east of the country, with an estimated investment of 5.5 billion US\$. The consortium is led by the Canadian-owned enterprise, Sheritt, who received a temporary mining license in September 2012.

These two projects mark a change in scale in mining in Madagascar, and the country's entrance into the major raw material-producing countries.



Following the 2009 political crisis, the investment rate slowed down considerably, and no other large-scale exploitation project has since been established. Nevertheless hundreds of licenses for the exploration of iron, nickel, cobalt, copper, coal, gold, ilmenite, bauxite or uranium have been granted by the Madagascar authorities in the course of the last ten years. As a result of the current instability, many companies have suspended or cut back on their operations, and are waiting for the political situation to improve before continuing their activities. The most advanced projects that could start production quickly include:

- **Soalala** iron, in the regions of Boeny and Melaky in the northwest.<sup>62</sup> This is operated by the Chinese company Wisco, and has reserves that are estimated at about 600 million tonnes. There will soon be an environmental impact assessment.
- Coal in the **Sakoa** basin in the southwest.<sup>63</sup> This is operated by the Thai company PTT Asia Pacific Mining and Ital Thai Development.
- Ilmenite at **Ranobe**, in the southwest<sup>64</sup>, operated by the Australian company World Titanium Resources Ltd.

<sup>62</sup> [http://www.tresor.economie.gouv.fr/1630\\_le-secteur-minier-a-madagascar](http://www.tresor.economie.gouv.fr/1630_le-secteur-minier-a-madagascar)

<sup>63</sup> Ibid.

<sup>64</sup> <http://www.worldtitaniumresources.com/ranobe-project/overview/>

- Bauxite at **Manantenina** in the extreme southeast<sup>65</sup>, run by the Anglo-Australian multinational Rio Tinto/Alcan and the Madagascar company, Access Madagascar, that could use the port installations for the ilmenite mines that belong to QMM/Rio Tinto.
- Rare earth, niobium, tantalum and zirconium on the **Ampasindava peninsula** in the northwest<sup>66</sup> which belong to the Germany company Tantalus Rare Earths AG, together with the French chemicals company, Rhodia.
- Graphite and vanadium at **Green Giant** in the southwest<sup>67</sup>, property of the Canadian Energizer Resources Inc.



### Madagascar's 'rare earth'

The Madagascar government "*is not aware of what they are sitting on*".<sup>68</sup> These are the words of the general manager of the German company, Tantalus Rare Earths AG, when he boasted about the quality of the rare earth site that their company intends to exploit on the Ampasindava peninsula, in the northeast of Madagascar.

Rare earth elements are those indispensable metals used by the high technology industries. China has an almost total monopoly on their production at present. It has cut its export quotas in order to maintain price levels, which worries the developed countries. In this context, Tantalus hopes to become one of the main global producers of rare earths, thanks to their concession in Madagascar that covers a surface area of 300 km<sup>2</sup>. The company has just signed an exclusive contract with Rodhia to provide the Franco-Belgian company with all metals that may be mined from this area.

<sup>65</sup> [http://www.tresor.economie.gouv.fr/1630\\_le-secteur-minier-a-madagascar](http://www.tresor.economie.gouv.fr/1630_le-secteur-minier-a-madagascar)

<sup>66</sup> [http://www.tre-ag.com/operations/tre-project.aspx?sc\\_lang=en](http://www.tre-ag.com/operations/tre-project.aspx?sc_lang=en)

<sup>67</sup> <http://energizerresources.com/projects/green-giant-vanadium.html>

<sup>68</sup> François Becker, *De Madagascar, un Allemand allié à Rhodia veut régner sur les terres rares*, AFP, 23rd April 2012.

Although China is the main global producer of rare earths<sup>69</sup>, this is essentially the result of weak social and environmental legislation. Mining and refining of rare earths has major environmental impacts: the colossal amounts of earth that are removed to extract just a few grams of metal, the toxic waste (heavy metals, sulphuric acid), pollution of water tables etc.

For the Friends of the Earth, the European Union's awareness of their dependency on certain resources should lead to their limiting consumption and not approving of the destruction of the environment in countries of the South by European companies operating there.<sup>70</sup>

### 3. Ilmenite mining by QMM/Rio Tinto at Taolagnaro: a social and environmental disaster

In the Taolagnaro region, at the extreme southeast of Madagascar, ilmenite mining is carried out by QIT Madagascar Minerals SA (QMM). This company is 20% government-owned, with 80% belonging to the Anglo-Australian multinational, Rio Tinto.<sup>71</sup> They are a giant in the mining industry sector, and are the third-largest global group in terms of capital, with an annual turnover of 57 billion US\$ in 2010. This is almost six times higher than the GDP of Madagascar. Rio Tinto's ability to influence is such that the company appears to be "*responsible since they first began operating in the country in 1986, for the biggest mining reforms that the sector has undergone*"<sup>72</sup>, according to the specialist, Bruno Sarrasin.

The Taolagnaro mine is the biggest mining project ever established in Madagascar. QMM/Rio Tinto claim an investment of 990 million US\$ (35 million of which has been contributed by the government of Madagascar on the basis of a loan by the World Bank). The company is mining ilmenite and zircon (zircon mixed with sillimanite) from the sandy mineral mines of Mandena, Petriky and Sainte Luce, whose reserves are an estimated 75 million tonnes of ilmenite, equivalent to a hundred years' worth of mining.<sup>73</sup> The raw minerals are then transported to Canada by sea, to the Sorel plant that belongs to Rio Tinto Iron and Titanium, where they are transformed into titanium dioxide, an industrial cleaning agent.<sup>74</sup> Mining began in 2009, following about 20 years of exploration and feasibility studies.

The social and environmental impacts of the QMM/Rio Tinto project are all the greater, given that the ilmenite mines are particularly intensive: the mine will progressively destroy 6,000 hectares of coastal forests. The mining process used is very spectacular. "*Once the land has been cleared*", explains the specialist, Jean-Pierre Revéret, "*a 500 metre-long pond by 300 metres wide is dug. It is 15 metres deep. A dredger and floating separation unit move slowly forwards and suck up the sand at one end of the pond, according to a predetermined path.*"<sup>75</sup> Ilmenite and zircon are separated from the other heavy metals and sand by mechanical, magnetic and electrostatic processes. The tailings are then left behind in the pond, moving forward at the rate of a few metres a day, for several decades. The presence of monazite, a radioactive mineral, in the tailings, is greatly worrying local populations.

The introduction of a project of this scale in one of the poorest, most remote areas of the country has led to huge economic and social change. An estimated 6,000 people live in or close to the direct mining area. Field studies that were carried out in 2009 by the Panos Institute London and Friends of the Earth England, Wales and Northern Ireland<sup>76</sup> as well as the American anthropologist Caroline

<sup>69</sup> Audrey Garric, *Terres rares: un relâchement chinois en trompe-l'œil*, Le Monde, 24th August 2012

<sup>70</sup> C.f. the Friends of the Earth site: <http://www.amisdelaterre.org/Madagascar-l-Europe-cherche-a.html>

<sup>71</sup> Rio Tinto, *Partenariat de Rio Tinto avec l'Etat Malagasy*, <http://www.riotintomadagascar.com/french/aboutGovernment.asp>, consulted 30th October 2012

<sup>72</sup> Bruno Sarrasin, 2010, *Op. cit.*, p. 158.

<sup>73</sup> Estimates of the mine's lifespan vary according to sources from 40 to 100 years.

<sup>74</sup> Rio Tinto / QIT Madagascar Minerals SA, *Développement durable: rapport 2011*, p. 6.

<sup>75</sup> Jean-Pierre Revéret, *Investissement minier et développement : l'exploitation de l'ilménite dans la région de Tolagnaro (Fort-Dauphin)*, *Etudes rurales*, 2/2006 (n° 178), p. 213-228. In 2011 a dry-mining process was established to complement the dredger.

<sup>76</sup> *Development recast? A review of the impact of the Rio Tinto ilmenite mine in Southern Madagascar*, report by Rod Harbison, Head of Environment at Panos London, for Friends of the Earth England, Wales and Northern Ireland (EWNI), 2007 ([http://www.foe.co.uk/resource/reports/development\\_recast.pdf](http://www.foe.co.uk/resource/reports/development_recast.pdf)).

Seagle<sup>77</sup> enabled the collection of dozens of testimonies by those families that have been affected by the construction work of the mine.<sup>78</sup>

There has been an increase in the number of conflicts around issues of compensation, particularly for households that have customary or collective land rights. But as Caroline Seagle underlines, *“monetary compensation may not replace the value of labour and food to some people living in the village”*<sup>79</sup>, and the issue of access to the resources and to land cannot be solved by simple compensation.

The issue of the ‘preservation’ of particularly exceptional biodiversity of this coastal zone is a central axis of the QMM/Rio Tinto communication strategy. The company has funded research work and built partnerships with Kew Botanical Gardens in London, the international organisation Birdlife, and the University of Madagascar. It has committed to rehabilitating the site after mining activities, and is funding 620 hectares of protected areas around the mine’s perimeter or close by, to which local people have limited access.<sup>80</sup> In their declarations, Rio Tinto states *“their objective is to have a positive net impact on biodiversity.”*<sup>81</sup> The company never misses any opportunity to underline that the ecosystems that have been destroyed by extraction were going to be destroyed anyway by wood-cutting for firewood and slash-and-burn agriculture. This is a very strange game of words that changes an industrial power that is responsible for destroying 6,000 hectares of rare coastal forest into a champion in the conservation of biodiversity and makes local communities responsible for the ‘unsustainable’ management of the woodland heritage.<sup>82</sup>

#### 4. Mining and industrial risks: the Ambatovy project supported by the European Union.



"Ambatovy" Plant site

© Ambatovy.com

<sup>77</sup> Caroline Seagle, Inverting the impacts: Mining, conservation and sustainability claims near the Rio Tinto/QMM ilmenite mine in Southeast Madagascar, *Journal of Peasant Studies*, 39:2, 2012, p. 447-477.

<sup>78</sup> Voir également Emmanuel Blivet, « Triste mine sur la Madagascar », *Alternatives Internationales*, septembre 2009 (<http://www.emmanuelblivet.com/fr/texte-6921-triste-mine-a-madagascar.html>).

<sup>79</sup> Caroline Seagle, 2012, *Op. cit.*, p. 457.

<sup>80</sup> Ibid. p. 126.

<sup>81</sup> Rio Tinto, Déclaration de principe en matière de biodiversité in *Rio Tinto et la biodiversité : obtenir des résultats sur le terrain*, 2008, p. 4.

<sup>82</sup> Caroline Seagle, 2012, *Op. cit.*

Named after an area near the small town of Moramanga, about hundred kilometres east of Antananarivo, Ambatovy is a giant nickel and cobalt mining project. The site is considered to be 'world class' and could soon become one of the biggest laterite nickel mines in the world. The exploitation phase is planned to last twenty-seven years, with an annual production of 60,000 tonnes of refined nickel, 5,600 tonnes of cobalt and 210,000 tonnes of ammonium sulphate, to be used for fertiliser.<sup>83</sup> The first consortium to be approved under the Law on major mining investments (Loi sur les grands investissements miniers: LGIM), the Ambatovy project was granted the exploitation permit in September 2012.

The estimated construction costs of the Ambatovy project are approximately 5.5 billion US\$.<sup>84</sup> This represents the biggest foreign investment ever in Madagascar, and one of the biggest mining projects in Sub-Saharan Africa. It has been funded by many public institutions, particularly the European Investment Bank (EIB) who has committed 260 million euro to the project.

The ecological footprint of the Ambatovy project is considerable. The mine is situated in a highly sensitive ecological region and, according to the Ambatovy studies<sup>85</sup>, there are many endemic species of animals and plants in the 1,300-hectare mining zone (the Ambatovy and Analamay mines). More than one hundred species are included in annexes of the Convention on International Trade in Endangered Species of Wild fauna and Flora as being under threat. Almost 2,500 hectares of forest (including zones of primary forest), have been affected by the construction of the 220 kilometres of pipeline and project infrastructure, or will be affected by the opencast mining. The greenhouse gas emissions from the refinery have been evaluated at an estimated 2,700,000 tonnes of CO<sub>2</sub> equivalent per annum in the production phase. This alone would lead to an increase in greenhouse gas emissions of 0.6% for Madagascar.

The greatest worries concern the impact of the project on water resources and risks of pollution. 15 million cubic metres of water will be pumped from the Mangoro River to feed the pipeline as well as 12 million cubic metres from the Ivando River to refine the minerals. This is the annual equivalent of domestic consumption of about one million people in Madagascar.<sup>86</sup> The treatment of the minerals will produce approximately 220 million tonnes of residue over the 27-year life of the project. They will be stocked in a huge 750-hectare area in the valley to the southwest of Toamasina. This acid mud that will be neutralised by alkaline soil will still be potentially polluted (manganese, copper, zinc, sulphates etc) and present a risk for ground- and surface-water in the region, should there be any overflow. Although the solid residual matter will remain stored in this area, most of the excess water will be drained into the Ocean. The impact study<sup>87</sup> that was carried out and published by Ambatovy recognises that the high volume of this continual wastewater drainage will significantly increase the level of certain minerals in the water, but is counting on natural dilution to lessen the effects.

Treatment and refining of minerals is a complex business and uses a massive quantity of chemical inputs: high temperature acid to dissolve the nickel and cobalt, hydrogen sulphate to precipitate the metal concentrates, ammonium sulphate and ammoniac to react with the hydrogen and so on. During the exploitation phase there will be highly significant atmospheric emissions of sulphur dioxide. Stocking important volumes of chemical products also constitutes an environmental risk, as well as a risk for those working on the site. The *de facto* risk of industrial accidents has been under-evaluated. The sustainable development report of Ambatovy for 2010 indicates that there were two major environmental incidents that required decontamination (spillage of over 100 litres)<sup>88</sup>, but does not specify their exact nature. In 2012, the pre-production tests that have been carried out in the treatment plant have led to at least three leakages of sulphur dioxide, on the 26<sup>th</sup> of February and the 8<sup>th</sup> and 13<sup>th</sup>

<sup>83</sup> Ambatovy, *Supporting Growth and Development in Madagascar 2010*, June 2011, p. 5 (<http://www.ambatovy.com/docs/wp-content/uploads/AmbatovyMagEng2011.pdf>).

<sup>84</sup> Ibid.

<sup>85</sup> Given the lack of any independent public report, the environmental impact assessment carried out by Ambatovy remains the main source of information for citizens or researchers who are interested in the social or environmental impacts of the project. Cf. Summary of the *Etude d'impact environnementale, projet Ambatovy*, April 2006

<sup>86</sup> M.M. Mekonnen, A.Y. Hoekstra, *National water footprint accounts: the green, blue and grey water footprint of production and consumption*, Value of Water Research Report Series N°50, UNES CO-IHE, 2011.

<sup>87</sup> *Etude d'impact environnementale, projet Ambatovy – volume D, usine de traitement, addendum*, August 2006, p. 13-14 (<http://www.sherritt.com/getattachment/7954b6d6-1098-4f0a-8ce9-dca23b74eaf6/Process-Plant-Addendum---French>).

<sup>88</sup> Ambatovy, *Rapport de développement durable 2010*, p. 27.

of March. Following these emanations, scores of people reported respiratory problems and the government is concerned about the risk of pollution to the Ranomainty River that supplies Toamasina with its drinking water<sup>89</sup>.

Current doubts about Ambatovy's respect of its commitments are such that the production permit that was issued in September 2012 by the Madagascar authorities is only valid for six months. A technical, environmental and financial audit is to be carried out during this period by an international consultancy. This temporary production permit will also involve a 50 million US\$ deposit being paid for environmental restoration of any damage that does occur.<sup>90</sup>

### **The European Investment Bank and the mining sector in Africa: a struggle against poverty or support for European multinationals?**

There are several private banking institutions among those funding the Ambatovy project, including three major French banks (BNP Paribas, Société Générale and Crédit Agricole), as well as public financial institutions such as the Japanese Bank for International Cooperation (JBIC), the European Investment Bank (EIB) and public agencies that guarantee exports such as those of Canada and South Korea.<sup>91</sup>

The EIB was established in 1958 by the Treaty of Rome and is the European Union's financial institution. Its shareholders are the member states. Their lending activity has progressively spread to projects outside the EU. When the bank is involved in Africa, the Caribbean or Pacific (the ACP countries), the EIB acts on the mandate conferred by the Cotonou Agreement and their investments are theoretically aimed at poverty reduction, sustainable development and the progressive integration of states into the global economy. Yet in these regions an important part of the loans is dedicated to the mining sector. Between 2000 and 2012 the EIB granted almost 700 million euro-worth of investment to African mining projects (10% of their overall commitments to the ACP zone), as opposed to 633 million to water and sanitation, with no loans at all granted to the vital sectors of education or health.<sup>92</sup> The 260 million euro loan granted by the EIB in 2007 to Ambatovy is by far the most important sum lent by the public bank to a project in the ACP zone, irrespective of the sector of activity.

For Ambatovy, similar to all other loans granted to the mining sector, the EIB funding is provided to subsidiaries of major corporations of the North. How are these mines that primarily benefit the Western multinationals, and destroy the environment, meeting a development objective? The environmental or social norms of the EIB do not enable it to correctly evaluate the impacts of projects: they appear to be approved on the sole basis of their profitability. Is this the approach that we are entitled to expect from the European Union's public bank? The EIB has become the *de facto* arm of the European Commission in securing energy and raw material supplies for the Union.

These are all the reasons that led to Friends of the Earth launching a campaign in 2007 'Europe mining Africa'.<sup>93</sup> Together with their European partners, they have requested that the European Investment Bank refrain from funding any mining projects as long as they have not substantially reformed their practice. 50 members of the European Parliament took up this request for a moratorium in 2011.

<sup>89</sup> Council of Ministers 4th April 2012.

<sup>90</sup> Ambatovy, *Communiqué sur l'obtention du permis d'opérer*, 14th September 2012.

<sup>91</sup> List of "Partners and funders" as indicated on the Ambatovy project web-site:

<http://www.ambatovy.com/docs/?p=179>

<sup>92</sup> Calculated according to the data-base of loans signed by the EIB:  
<http://www.eib.org/projects/loans/list/index.htm>.

<sup>93</sup> Friends of the Earth, *Banque européenne d'investissement : six ans de financement du pillage minier en Afrique*, November 2007. For further information on this campaign: <http://www.amisdelaterre.org/Campagne-BEI-l-Europe-mine-l.html> and <http://www.counterbalance-eib.org/>.

## **CONCLUSIONS**

The presence of important oil reserves and many different minerals, as well as an investor-friendly legal framework for foreign capital, have made Madagascar a favourable target for mining and oil companies who are rushing to exploit new sources.

Major mining and oil projects are perceived as a godsend by the national and local authorities in a country that is fragile both economically and politically. These planned projects also represent a threat to both local communities that are already vulnerable and the island's uniquely rich environment and unique native species that need to be preserved.

Madagascar is not an isolated case. It does, however, constitute a particularly noteworthy and worrying example of the current practice of the multinational oil and mining companies in the countries of the South, as well as of the consequences of public policies, particularly those of the European Union, that are encouraging this race for raw materials.

The case of the extractive industries of Madagascar thus reveals a totally unequal balance of power between local populations and the multinationals that operate without any State control and make huge profits. It also underlines the irresponsibility of important public actors such as the EIB or the World Bank, who support projects that in no way contribute to alleviating poverty.

## RECOMMENDATIONS

### 1. Recommendations to French, European and Madagascar Public Authorities

*Concerning activities of European multinationals:*

- Adopt binding legislation that imposes legal responsibilities on companies that are also applicable to activities of their foreign subsidiaries.
- Impose financial and extra-financial reporting on a country-by-country basis, so that multinationals stop taking advantage of the regulatory, tax and legal havens that facilitate their grabbing natural resources.
- Guarantee that public funding should not be used to violate human rights, workers' rights or the environment, and make independent human rights and environmental impact assessments compulsory prior to funding projects, as well as a follow-up process that includes sanctions after projects have started.

*Concerning the extractive industries:*

- Guarantee access to fully available information on mining and oil projects. Introduce mechanisms to take locally adapted legal action.
- Respect community rights and the central role of communities in decision-making on natural resources of their territories. Obtain full, prior and informed consent before granting any mineral or oil license.
- Specifically include the various kinds of 'unconventional oil' into account in French and European legislation and recognise the high carbon-intensity of the fuel they produce. Ratify the October 2011 proposal of the European Commission on the implementation of the Directive on the quality of fuel as soon as possible.
- Adopt and implement ambitious and binding policies in France and Europe that will curb over-consumption of metal and fuel and encourage energy efficiency as well as recycling, reutilisation and repairs.
- Impose a moratorium on funding of all mining projects on the European Investment Bank, extended until the Bank has fully adopted all the recommendations of the Review of Extractive Industries, and make sure that the appropriate mechanisms are put in place to guarantee their implementation.

### 2. Recommendations to extractive companies and private banks

- Suspend and stop investments in the most controversial fossil fuel and mining projects, particularly those where 'unconventional' oil is being exploited, and where people's health and their means of subsistence are affected, that are destroying the environment and that are having a disastrous impact on climate.
- Make ambitious, planned commitments to invest in clean renewable energy, and implement these projects.