

OPENING PANDORA'S BOX:

The New Wave of Land Grabbing by the Extractive Industries
and The Devastating Impact on Earth (2012)

A report by The Gaia Foundation

EXECUTIVE SUMMARY

MINING, OIL and GAS: the impact of these extractive industries has always raised serious social and environmental concerns. However, this report signals a wake-up call to the fact that, today, the scale, expansion and acceleration of these industries are far greater than most of us realise. We are no longer talking about isolated pockets of destruction and pollution. Nowadays, chances are that, no matter where you live on Earth, land acquisitions for mining, oil and gas might soon be at your door. This trend is now a major driver of land grabbing globally, and poses a significant threat to the world's indigenous communities, farmers and local food production systems, as well as to precious water, forests, biodiversity, critical ecosystems and climate change.

This report alerts global citizens to the dynamics in the extractive industries as a whole, and shows the alarming scale of this overall trend. Just as in the Greek myth, when Pandora opened the box and let out all the troubles known to mortals, so too this new wave of land grabbing for mining is leading to unimaginable destruction. If hope does remain, we must wake-up and act now.

The extent and the scale of the increase in extraction over the last 10 years is staggering. For example, iron ore production is up by 180%; cobalt by 165%; lithium by 125%, and coal by 44%. The increase in prospecting has also grown exponentially, which means this massive acceleration in extraction will continue if concessions are granted as freely as they are now.

The period between 2005–2010 has seen China's mining sector grow by nearly a third. In Peru, mining exports for 2011 have increased an astonishing one-third in one year, and the region of Puno in the South of the country has seen mineral concessions almost tripled between 2002 and 2010. In South Africa meanwhile, a consortium of international investors has applied for the rights to drill for shale oil and gas for a section covering around 10% of the country's surface.

Across Latin America, Asia and Africa, more and more community lands, rivers and ecosystems are being despoiled, displaced and devoured by mining activities. Enormous industrial wastelands are created from vast open pit mines and mountain top removal; voracious use and poisoning of water systems; deforestation; contamination of precious topsoil; air pollution; acid leaching; cancer clusters – the catalogue of devastation is relentless and growing.

The rights of farming and indigenous communities are increasingly ignored in the race to grab land and water. Each wave of new extractive technologies requires ever more water to wrench the material from its source. The hunger for these materials is a growing threat to the necessities for life: water, fertile soil and food. The implications are obvious.

Mining does not only pose a challenge for the global South. The development of “fracking” – which involves the high-pressure injection of a toxic mix of chemicals into deposits of shale rock to release the natural gas trapped within – means that developers are now eager to target the large shale oil and gas deposits under North America and Europe. With the inherent difficulty of safely containing the water and chemicals that are injected into the ground, these toxic cocktails inevitably leach into aquifers and local water systems, and pollute them. In the UK, there are already several shale oil and gas applications pending, even though one developer recently admitted that two minor earthquakes in Lancashire were probably caused by its fracking operations.

This dramatic increase in the ambition, scope and devastation from the world's extractive industries comes as a result of a number of factors converging simultaneously. The rising prices of metals, minerals, oil and gas have acted as an incentive to exploit new territories and ‘less pure’ deposits. Technologies are becoming more sophisticated in order to extract materials from areas which were previously inaccessible, uneconomic, or designated as being of ‘lower quality’. An overall trend is that deposits with the highest quality or concentration have already been used up. This means that extraction from less accessible deposits requires more removal of soil, sand and rock, and therefore the gouging out of increasingly larger areas of land and water, as seen with the vast Alberta Tar Sands in Canada.

On top of all of this, there has been a marked acceleration of global investments in extractive industries in the last 3 years. The 2008 collapse of financial markets has led hedge and pension fund investors increasingly to target metal, mineral, oil and gas commodities, and their associated financial derivatives, in order to recoup their losses and spread their risk. This has had the effect of further driving their extraction.

The underlying stimulus to all this, which governments and citizens have yet to adequately address, is the thorny issue of consumption. According to the Mineral Information Institute, the average American born today will use close to 1,343 metric tonnes of minerals, metals and fuels during his or her lifetime, this is more than 17 tonnes per person per year. The United Nations Environment Programme (UNEP) reports that a business-as-usual scenario would lead to a tripling in global annual resource extraction by 2050 – a scenario that the Earth simply cannot sustain.

There are no easy answers. The environmental impacts of fossil fuel extraction and combustion are well documented, while uranium mining and nuclear power are already fraught with controversy.

And while many have pinned their hopes on the potential of “green energy” solutions, such as electric cars, solar panels and wind turbines, these also all require significant amounts of technology and minerals: rare earths primarily among them. As the use of green technologies scales up, inevitably, it too translates into a massive increase in yet more devastating mining activity.

As we know the industrial economic model is premised on endless ‘growth’, defying the laws of life. Ultimately the options are brutally clear: either enough of us are able to turn the tide, based on an economic model that supports living processes, or we will be forced to do so, with much unnecessary suffering. Meanwhile, there are currently few incentives or regulations to ensure the various actors in the production chain constrain the shameful waste

and obsolescence. To re-use, recycle, design for recyclability or to develop the systems that use materials efficiently and economically, would at least close the cycle of waste and reduce our impact, some say by a significant amount.

We live on a beautiful and wondrous planet – the only one we know of in our cosmos. She suddenly feels very small and vulnerable in the face of the momentum of destruction we have unleashed on her, through our conscious and unconscious actions. We must recognise this reality: if we continue in our current direction, our children will be left to clean up an increasingly barren and unstable planet, littered with toxic wastelands and a huge scarcity of water, which we would have left in our wake.



Kameocott's Bingham Canyon Mine/ Hemera/ Thinkstock



In Collaboration with



OPENING PANDORA'S BOX:

The New Wave of Land Grabbing by the Extractive Industries and

The Devastating Impact on Earth (2012)

Author: Philippe Sibaud

Commissioned by:

The Gaia Foundation
6 Heathgate Place
Agin-court Road London
NW3 2NU

Tel. +44 (0)207 428 0055

Fax. +44 (0)207 428 0056

www.gaiafoundation.org