

Natural Resources as a Shared Inheritance:

A needed step for a Just Transition

This representation is from the [Goa Foundation](#), a non-governmental organization (NGO) in India with a long history of work on the environmental issues involved in extractives; and [The Future We Need](#), a global movement to make the intergeneration equity principle foundational for civilization, starting with minerals.

Summary

The principle of Intergenerational Equity (IE) is, at its heart, quite simple. It is our duty to ensure future generations inherit at least as much as we did. Only if we succeed do we have a right to consume the fruits of our inheritance. Any loss is a loss to the people alive and all future generations.

If we successfully protect our inheritance, our children will be at least as well off as we are. If we leave a bequest as well, they will be better off than us. Without intergenerational equity (IE), humans are doomed. Everyone will want to consume their inheritance, leaving the next generation poorer. Any group/society that adopts this path will be ruined in no time, like an addict selling the family silver.

Extractives violate human rights

In most nations, the state holds natural resources, including minerals, as a trustee on behalf of the people and especially future generations. Legally, this is the Public Trust Doctrine (common law), Public Domain (civil law) or the Common Heritage of Humankind (international law for planetary commons). The primary objective of the trustee / manager is to maintain the corpus of the trust, the shared inheritance of natural resources.

The extraction of oil, gas and minerals is effectively the sale of this inheritance, with royalties and other proceeds being the consideration paid in exchange for the mineral wealth extracted. Unfortunately, governments all over the world treat the proceeds obtained from selling their mineral wealth as revenue or income, a crucial error.

As this hides the real transaction — the sale of inherited wealth — it results in governments selling minerals at prices significantly lower than what they are worth. This is driven by lobbying, political contributions and corruption. For example, official statistics indicate that [Australia lost 82% of the value of its minerals](#) (after extraction costs and a reasonable profit for the extractor) extracted over the decade 2000-10. Such losses are a hidden per-head tax which makes a few extractors and their cronies super-rich. Inequality grows sharply. This is loot economics.

Worse still, the trifles received by the government are treated as a windfall and happily spent, leaving neither the minerals nor their value for future generations to inherit. This is neither sustainable nor fair nor just!

Location / estimate	Mineral	Period	Estimated Loss Rate
Australia	All	10 years (2000-2012)	82%
Botswana	All	36 years (1978-2014)	7%
Burkina Faso	Gold	5 years (2009-2013)	67%
India – Goa – 2014 estimate	Iron ore	5 years (2004-2009)	99%
India – Goa – 2015 estimate	Iron ore	8 years (2004-2012)	95%
India – NMDC	Iron ore	10 years (2004-2014)	92%
India – Sesa Goa / Vedanta	Iron ore	8 years (2004-2012)	95%
India	Oil & Gas	15 years (1990-2005)	65%
Jordan	Phosphate	9 years (2002-2010)	48-87%
Jordan	Potash	9 years (2002-2010)	35-65%
Peru – 2010 estimate	Many	9 years (1998-2006)	71%
Peru – 2012 estimate	Many	9 years (2000-2008)	78%
South Africa	Gold	9 years (1966-1993)	70%
South Africa	Coal	9 years (1966-1993)	96%
UK – 2014 estimate	Oil & Gas	34 years (1979-2012)	39%
UK – 2014 estimate	Oil & Gas	36 years (1975-2010)	35%

There is [growing empirical evidence of large losses in mining](#) from around the world (see table above). There is also growing [evidence from the IMF](#) that many governments of resource-rich nations, including the UK and Norway, face declining public sector net worth - their governments are becoming poorer. Both indicate unsustainable mining.

Losses drive many of the other problems with mining. In effect, the people and future generations of Australia have sold mineral wealth worth \$100 for \$18, a loss of \$82. Naturally the extractors are keen to extract as quickly as possible and move on. Trees, tigers and tribals (indigenous peoples) are labeled as anti-development or anti-national. When they resist, we see conflict and civil war.

Achieving a Just Transition

At present, governments treat royalties and other mineral sale proceeds as “windfall revenue”. Metaphorically, “windfalls” are unpredictable, ownerless, cannot be planned for or managed, and therefore opportunities that should be seized, and consumed like a lottery. If \$18 is received for allowing mining, doubling mining would result in \$36. Politicians and voters perceive more mining = more government revenue = good. Further, since extraction isn’t recognized as the sale of inherited wealth, the true loss of \$82 lies hidden. Doubling mining would make a bad situation significantly worse.

It is important to understand that as long as royalties and other mineral sale proceeds are called “revenue”, “income”, “earnings” or “tax”, politicians and voters will advocate for increasing extraction. This will lead to every bit of fossil fuel being extracted. Civilization will collapse.

Transition minerals are no different. If we continue treating transition minerals as a source of “windfall revenue”, and businesses indulge successfully in rent-seeking, we will continue to witness the loss and consumption of the shared inheritance of minerals, which will incentivize the variety of other human rights violations associated with extractives.

How extractives should be organized

If we see the intergenerational equity principle as foundational, minerals as a shared inheritance and extraction as the sale of the mineral wealth, a number of recommendations follow. We begin with the principles of fair mining:

1. Natural resources, including minerals, are a shared inheritance, owned by the state as a trustee for the people and especially future generations (Public Trust Doctrine / Public Domain / Common Heritage of Humankind).
2. As we have inherited the minerals, we must ensure future generations inherit either the minerals or their full value (Intergenerational Equity Principle).
3. If we extract and sell our mineral wealth, **the explicit objective must be to achieve Zero Loss in value**, i.e., the state as trustee must capture the full economic rent (sale price minus cost of extraction cost including reasonable profit for extractor). Any loss is a loss to all of us and our future generations, and makes some rich. Unfair.
4. Like Norway, the entire mineral sale proceeds must be saved in a Future Generations Fund (the "Fund"), also a part of the shared inheritance. The Future Generations Fund could be passively invested in a global portfolio of low-cost index tracking ESG funds.
5. Only the real income of the Fund may be distributed, only as a Commons Dividend, equally to all as owners. Future generations would benefit from the dividend in their turn.



These Principles of Fair Mining are likely constitutional in most countries. They are widely seen as fair, ethical, moral, just, and right, and promote equality, liberty, and fraternity. The principles are easy to understand, communicate, enact, and monitor. The fair mining principles diversify risk while likely improving returns, positively impacting inequality and poverty. Reduction in losses is likely which in turn would limit corruption, crony capitalism and growing inequality. Even if limited in size, the dividend would reduce extreme poverty, particularly in poorer countries.

From a [public finance management](#) standpoint (a) this is sustainable – capital has been maintained; (b) the savings rate would rise; (c) it is nearly impossible to outperform the global market rate of return; (d) the dividend is in effect a Universal Basic Income; (e) lower inequality leads to higher economic performance; and (f) to more efficient public investment and tax administration, as budgets no longer have easy mining money to rely upon. This is a six-fold improvement over current practice.

Other inheritances are impacted by extraction

This is not enough. Extraction impacts other inheritances.

1. For **the environment**, under the **Precautionary Principle**, we must first create no-go areas. Then we must prohibit potentially high-risk practices (e.g., fugitive methane emissions). We must cap extraction across multiple projects to keep cumulative damage within limits. Of course, we need strong environmental regulations and enforcement.

Under the **Polluter Pays Principle**, we must require the mitigation hierarchy – avoid, restore, offset, compensate. Like the UK's 25 Year Environmental Plan, the objective should be to leave future generations with more forests, clear streams, etc., than we have. Mining projects should have a goal to improve the environment, not avoid harm.

2. Similarly for **the local community and their social capital**, we first and foremost need **Free, Prior and Informed Consent (FPIC)**. Under the Precautionary Principle, we must first create no-go areas (e.g., sacred mountains, like Niyamgiri). Then we must prohibit practices that are potentially high risk for local communities (e.g., leave uncontacted tribes alone). We must cap extraction across multiple projects to keep cumulative damage within limits (e.g., cultural dilution, prostitution).

Under the Polluter Pays Principle, we must require the mitigation hierarchy – avoid, restore, offset, compensate. This drives the demand for local benefit sharing.

3. Just as the mineral is an inheritance, so are the **jobs and income from extraction**. These are inherited opportunities that deplete with extraction. Therefore, extraction must be capped to ensure availability of the income from extraction over multiple generations. Further, the first right to these incomes / opportunities must be to the mineral owners. This understanding drives the widespread demands for local content, local procurement, local employment and technology transfer.
4. Similarly, the **opportunity to use the mineral for useful things** (ploughshares or swords) is a valuable inheritance. This drives some countries to designate some of their minerals as strategic reserves while importing minerals for their own needs.
5. Yet another inherited opportunity is to use extraction to **develop other aspects of the society**. For example, Norway has successfully created global core competencies in deep sea oil extraction and rig building. Others have deliberately used a new mine to create multi-use infrastructure at low incremental cost.

Safeguarding our shared inheritance

Minerals represent great wealth. Both world wars were ultimately about access to resources. Protecting great inherited wealth against theft, loss or waste requires a paranoid mindset to ensure we fulfil our duty to be good ancestors. [Our recommendations](#) are informed by best practices in global wealth asset management.

1. The goal of the state as trustee / manager must be to conserve the corpus of the inheritance – **avoid theft, loss, waste or consumption**. They must treat the minerals, the mineral sale proceeds and the Fund as part of the trust corpus, not proprietary assets – no commingling. Royalties and other sale proceeds must be treated as capital, not “revenue”. Losses must be explicitly disclosed, and the trustee responsible for compensating the loss from proprietary assets. The

trustee / manager must prepare comprehensive accounts for the shared inheritance held in trust, separate from its own proprietary financial statements.

2. In order to prevent theft during the extraction process, the trustee / manager must implement a **best-in-class control system**. This includes a high security mineral supply chain system, best practices from outsourcing contracts, system auditors, a whistleblower reward and protection scheme, etc.
3. Known thieves cannot handle the wealth of humankind. Further, minerals are a regular part of money laundering / terrorism finance. **Fit and Proper Person Tests** (and [Integrity due diligence](#) more generally) are essential for all involved in managing our wealth, both insiders and outsiders.
4. Each one of us has a duty to future generations to ensure that the shared inheritance is intact. Therefore, the people, as the real owners, should be empowered to verify that they have fulfilled their duty. This requires **Radical Transparency** including open access to all data (including the data feeds) in real time at no cost to the public. Extractors, as outsourced service providers converting mineral wealth to financial wealth, should be required by law to disclose all extraction information without exception. This goes far beyond the EITI standard.

Since nations have permanent sovereignty over natural resources, rent-seeking by extractors and others are violations of the principles of intragenerational equality and intergenerational equity. Trustees have fiduciary obligations. It is important to understand that extractors – and others in the mineral supply chain – are merely outsourced service providers in a wealth management process. They should be managed similar to the financial wealth management industry to avoid theft, loss or waste of inherited wealth. Legal corruption such as lobbying and political contributions must be banned or tightly restricted with utmost transparency.

Significant progress already

India's National Mineral Policy 2019 declares: *“Natural resources, including minerals, are a shared inheritance where the state is the trustee on behalf of the people to ensure that future generations receive the benefit of inheritance. State Governments will endeavour to ensure that the full value of the extracted minerals is received by the State.”* There are a [number of other aspects](#) from the points above that are also contemplated in the policy.

Further, in litigation initiated by the Goa Foundation, India's Supreme Court has ordered the creation of a Goa Iron Ore Permanent Fund (current corpus ~\$80 million) as well as a cap on iron ore extraction to meet the requirement of intergenerational equity.¹ This is a global judicial precedent.

We are also happy to report that the International Public Sector Accounting Standard Board (IPSASB) has started work on a [new IPSAS on natural resources](#). The UN SNA as well as the IMF GFSM are reviewing their treatment of natural resources. Appropriate changes would enable the replacing of the “windfall revenue” paradigm with the “shared inheritance” paradigm, offering a pathway to understand the extent of rent-seeking and concomitant losses that violate the fundamental human right of equality.

Planetary commons, especially deep sea minerals

Minerals in the deep sea, Antarctica, the Arctic, the moon and outer space are all planetary commons with international treaties partially governing them. Deep Sea Mining is starting, and would likely set the precedent for all others. A key reason is the availability of transition minerals

¹[Goa Foundation vs UOI &Ors., WP\(civil\) 435 of 2012, judgment on 21-Apr-2014.](#)

without humans in the vicinity. However, it is apparent that we have little idea either about the value of the deep seabed minerals, or the environmental resources & the damage extraction will involve. If the International Seabed Authority contracts to sell our shared inheritance without knowing its value, we will almost certainly suffer a loss. The Working Group must address the planetary commons as well.

Recommendations

We strongly recommend that the Working Group (a) adopt the intergenerational equity principle as the foundation principle for extractives; (b) adopt the “shared inheritance” paradigm for natural resources and eschew “revenue”, “tax”, “earnings” or “income” when referring to royalty and other mineral sale proceeds; (c) recommend that IMF and related standards setters amend their standard to treat extraction as the sale of great inherited wealth; (d) recommend that states and other trustees / managers of mineral wealth treat it as wealth held in trust for the people and future generations separate from proprietary property; (e) recommend the implementation of the full framework suggested above, including the five principles of fair mining; (f) recommend that UNCLOS be updated to reflect our improved understanding of issues of biodiversity, corruption, transparency, etc., from extraction of minerals; and (g) similar legal treaties be negotiated for the other global mineral commons.

Conclusion

Adopting and faithfully implementing the intergenerational equity principle would ensure that the shared inheritance of mineral wealth will be managed for the broader benefit of the people alive and especially future generations. It will build freer, just, and more equal and fraternal humankind. It will promote real equality among humans. It is moral, ethical, fair and right. It fulfils our duties to our future generations. It is in keeping with the SDGs. It is in keeping with the Universal Declaration of Human Rights. *Let us be the generation that changes the course of history for the better, not the one that consumed the planet.*