Banking on natural capital

Businesses are increasingly at risk from disruptions to natural capital

Business processes rely on goods and services from natural systems in order to generate value. An example of this is the need for a stable and consistent supply of water for the power generation, agriculture and mining industries. There is increasing evidence that these underlying systems are under pressure, and are in some cases failing to operate at optimal levels. The productivity and viability of related business operations is therefore at risk. Below are some examples extracted from across the globe, to illustrate the problem we face:

- High water costs lead to US$92m in losses for Australia's second largest wine producer.
- Investigations by an agrochemicals and seeds producer in India uncovered 90% pollinator loss in growing market.
- Company shares slip by 11% as a British Columbia mine reduces production due to lack of water.
- A multinational fruit beverage company loses over 25% of its oranges across Florida due to rise in freeze events.
- El Niño compromises the financial viability of some hydro-electric power plants in Colombia.
- The margins of the frozen food products at a transnational consumer goods company plummet by 30% due to cod supply disruption.

(Source: WRI Corporate Ecosystem Services Review, ISAGEN website and Resource World)

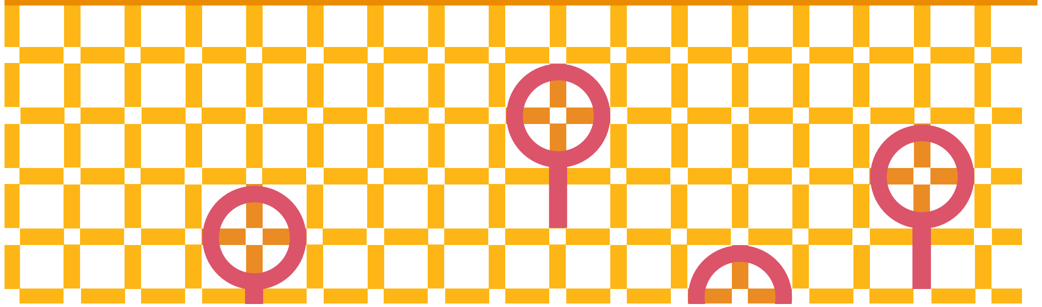
Natural capital risk explained

Natural capital is defined as a way of thinking about nature as a stock, such as water, forests and clean air. These enable economic activity by providing businesses with natural materials, inputs to production, protection from natural disasters and absorption of the pollution they emit, to name a few.

Businesses have a differing but definite dependency on these natural capital resources. In the era of climate change, environmental disruption can have a negative impact on business' dependencies on Natural capital. Financial institutions are exposed to this natural capital risk through the investment and lending processes.

The impact of natural capital risk on the risk universe of financial institutions can include:

- **Credit risk –** reduction in the credit quality of the portfolios of financial institutions.
- **Market risk –** potential losses in commodity trading.
- **Reputational risk –** damage to reputation due to financing of 'dirty' businesses.
- **Operational risk –** impairment of physical assets due to extreme weather events.
- **Compliance risk –** potential involvement of regulators in managing natural capital risk.
- **Liquidity risk –** inability to realise stranded assets.



Pertinent consideration

- A disruption to natural capital dependencies can force businesses to interrupt production and incur a shortfall in revenue. This could affect long-term financial performance.
- The financial institution needs to understand the potential impact to its investments resulting from current and future risks.
- Steps the financial institution can take to manage its exposure to natural capital risk.

What needs to change?

Financial institutions should be thinking about a comprehensive approach to managing natural capital risk, thus deriving value for key stakeholders.

- This requires each unique portfolio to understand the key environmental dependencies (i.e. the ecosystem products and services upon which each production process depends).
- Incorporate natural capital risk within the existing risk strategy.
- Assess new deals in line with set natural capital risk appetite.
- Monitor and report the financial institution's exposure to natural capital risk.

Practical tools to help with natural capital planning

We have participated in the second phase of the Advancing Environmental Risk Management (AERM) project, which aims to enable financial institutions to better understand, assess and integrate Natural capital related risks into the existing risk management process.

As a learning from our involvement on this project, we were able to derive a solution on how financial institutions can manage this natural capital risk, as outlined below:

- Assessment of an entity's exposure through a *rapid natural capital risk appraisal* (i.e. high-level risk mapping of portfolios).
- *Science-based scenario analysis & planning* through a deep dive portfolio data exploration and issue flagging.
- *Enhancement of the natural capital risk management processes and tools*.
- *Quantification of the exposure to natural capital risk*.

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