Global Canopy

Getting started with the TNFD LEAP approach

Santander Peru case study

January 2025

Overview

Santander Peru participated in Global Canopy's 2024 Taskforce on Nature-related Financial Disclosures (TNFD) familiarisation programme with South American banks to help them get started with nature-related assessments, covering all phases of TNFD's voluntary assessment approach, LEAP (Locate, Evaluate, Assess and Prepare).

This case study focuses on scoping and the Locate phase of LEAP. We use Santander Peru's approach to these as an example as to how banks, particularly in South America, can get started with the LEAP approach, and how to overcome obstacles to assessment of their nature-related dependencies, impacts, risks and opportunities. The case study is designed to build capacity and support learning among banks.

The scope of the case study is limited to how Santander Peru used what it learned during Global Canopy's familiarisation programme to apply tools and data to scoping and the Locate phase of LEAP. Further work would be required of Santander Peru to undertake the remaining phases of the LEAP approach. In line with the TNFD's recommendations, the bank can use the insights generated through LEAP to inform its strategy for managing nature-related risks and integrating nature-related issues into its decision-making processes.

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Nature-related risk in South America, a megadiverse region

South America, part of the wider Latin America and Caribbean (LAC) region, is home to five megadiverse countries: Brazil, Colombia, Peru, Ecuador and Venezuela. These host biodiversity hotspots and unique biomes of high value to people and the economy. From the longest mountain range on land, the Andes, to the most biodiverse rainforest, the Amazon, the sum of all terrestrial ecosystem services in the region is valued at more than US $14m annually[1]. The ecosystem services' diversity significantly contributes to South American communities in the form of food, energy, medicine, materials, water and livelihoods.

The LAC region houses 40% of the world's biodiversity, 16% of all forests and the second largest coral reef system[2]. The nature-rich region also faces several drivers that are negatively changing the state of nature. This can have significant financial implications for organisations with assets, operations or supply chains that depend on nature. In South America, the number of financial institutions in this situation is significant - around half of banks' credit portfolios are allocated to organisations highly dependent on ecosystem services[3].

Financial institutions in the region are exposed to nature-related risks due to two factors: 1) the degradation of nature (physical risks), and 2) the misalignment of economic actors with positive actions on nature (transition risks)[4]. Some of these nature-related risks could lead to material financial risk. Financial institutions can mitigate such risk and leverage opportunities by identifying, monitoring and managing nature-related risks in their portfolio.

1. Hernández-Blanco, M.; Costanza, R.; Anderson, S.; Kubiszewski, I. and Sutton, P. (2020) Future scenarios for the value of ecosystem services in Latin America and the Caribbean to 2050.

2. The Nature Conservancy (2022) Latin America Impact Report 2022.

3. Calice, P.; Diaz Kalan, F.; Dunz, N. and Miguel, F. (2023) Biodiversity and Finance: A Preliminary Assessment of Physical Risks for the banking Sector in Emerging Markets. Policy Research Working Papers from the World bank.

4. NGSF (2023) Nature-related financial risks: a conceptual framework to guide action by central banks and supervisors.

5. TNFD (2023) Guidance on the identification and assessment of nature-related issues: The LEAP approach.

The LEAP approach – Locate phase

The TNFD has developed LEAP (Locate, Evaluate, Assess, and Prepare), an assessment approach to help corporates and financial institutions assess their nature-related dependencies, impacts, risks and opportunities (nature-related issues). Outcomes from LEAP can help organisations manage and integrate nature-related issues into their decision-making processes.

The first phase of LEAP, Locate, is key to help identify risk sources - nature-related dependencies and impacts, which are location-specific. When undertaking Locate, financial institutions are expected to identify the sectors, value chains and geographic locations where their portfolio assets interface with nature. In other words, the locations where portfolio assets interact with, or depend on, environmental assets and ecosystem services. Locate also involves a screening exercise to identify sectors that have moderate and high dependencies and impacts on nature, which could include 'heatmapping'.

Heatmapping

Heatmapping is a tool that can be used to help qualitatively summarise potential or actual exposure to nature-related risks and opportunities, revealing whether activities and/or assets potentially materially depend upon, or impact, nature[5].

Locate has four components that support a high-level (overview) and deep (priority locations) understanding of a portfolio's interface with nature:

- L1: Span of the business model and value chain;
- L2: Dependency and impact screening;
- L3: Interface with nature;
- L4: Interface with sensitive locations.

By considering these components and applying them iteratively, financial institutions can: identify the sectors and geographies where they allocate capital or provide products and services (L1); screen sectors in their portfolio with moderate and high dependencies or impacts on nature through heatmapping (L2); distinguish the geographies and the type of biome or ecosystem associated with those sectors (L3); and identify the key portfolio assets that require further examination (L4). It is likely that financial institutions with portfolios in the megadiverse region of South America have some assets in sensitive locations and may want to pay particular attention to L4.

Case study – Santander Peru

Santander Peru navigated the LEAP approach as part of Global Canopy's familiarisation programme to enhance its understanding of nature-related dependencies, impacts, risks and opportunities within its portfolio. The following is a summary of the process it followed to conduct the first phase: Locate.

LEAP phase: Locate: L1, L2, L3, L4

Financial institution: Banco Santander Perú S.A. is a commercial bank based in Peru, operating as a subsidiary of the Spanish multinational Banco Santander S.A.

Sector: Metals and mining, and agricultural products

Geography: Peru

Biome: Tropical and sub-tropical forests (T1), shrublands and shrubby woodlands (T3), deserts and semi-deserts (T5)

Tools used: ENCORE, Global Forest Watch

Scoping

Prior to conducting Locate, the TNFD recommends organisations take a quick, high-level scan of their nature-related data, skills and internal capacity to identify and assess nature-related issues.

Santander Peru has internal socio-environmental and climate change risk policies and a risk management team that already conducts assessments relevant to LEAP and to developing disclosures. The bank's scoping exercise showed that:

1. The bank has already identified broad sectors with the greatest potential to have impacts or dependencies on nature. These key sectors are part of Santander Peru's environmental, social and climate risk assessments.

2. The bank's risk management team has some level of nature-related data and expertise, mainly from the socio-environmental due diligence process conducted annually on portfolio organisations from its material sectors. However, it recognises the need to build a deeper understanding of data sets and analytical tools, for example, to map areas of high physical water risk relevant to its assets.

Building on its existing insights, Santander Peru developed a working hypothesis on its potential nature-related issues (as suggested in the LEAP guidance on scoping) during the Global Canopy programme.

Santander Peru's working hypothesis

Agriculture and mining are significant economic activities in Peru (GDP contribution of 8% and a proportion from the industry sector's 34%[6], respectively) and are among the sectors that require special attention based on their potential environmental, social, and climate change impact in Banco Santander's Environmental, Social & Climate Change (ESCC) risk management policy.

L1: Span of the business model and value chain

Santander Peru provides financial instruments to organisations throughout Peru. It has a clear understanding of the economic activities within its portfolio and classifies them using the International Standard Industrial Classification of All Economic Activities (ISIC), developed by the UN, and the NACE codes from the European Commission.

The bank examined its entire portfolio, spanning 11 sectors. It selected mining and agriculture as key sectors for further analysis.

Classification codes

The TNFD recommends mapping asset and activity data to the Sustainability Accounting Standards Board's (SASB) sector classification, the Sustainable Industry Classification System (SICS). SICS is a specialised classification system developed specifically for sustainability reporting and analysis. It differs from traditional industry groupings, like ISIC or NACE, but the sector classification can be approximated among them.

6. Lloyds Bank (2024) Peru: Economic and Political Overview

L2: Dependency and impact screening

Mining and agriculture are two of the broad sectors that Santander Peru monitors annually in line with its internal socio-environmental risk policies. Although it was aware that these sectors are material for the bank based on its materiality assessment and climate disclosure, it corroborated this using data from ENCORE to create a heatmap.

ENCORE is a free, online tool that helps organisations explore their exposure to nature-related risk and take the first steps to understand their dependencies and impacts on nature. Santander Peru extracted from ENCORE the dependency and impact materiality ratings of two sub-industries - diversified metals and mining and agricultural products - and heatmapped them from very-low to very-high. The result enabled a visualisation of the most material dependencies and impacts from the bank's portfolio:

- Dependencies: groundwater use, protection against flooding, erosion control and land stabilisation.
- Impacts: water use and water use change in land and water ecosystems.

L3: Interface with nature

Santander Peru delimited its exercise on Locate by selecting the most relevant clients in terms of exposure (nature-related dependencies and impacts) from the mining and agriculture sectors. It used Google Maps to extract the coordinates of one or two production plants per client. Using the Global Forest Watch tool, the bank overlapped the production plant geolocation on Peru's map and visualised the interface between its mining and agriculture portfolio with nature.

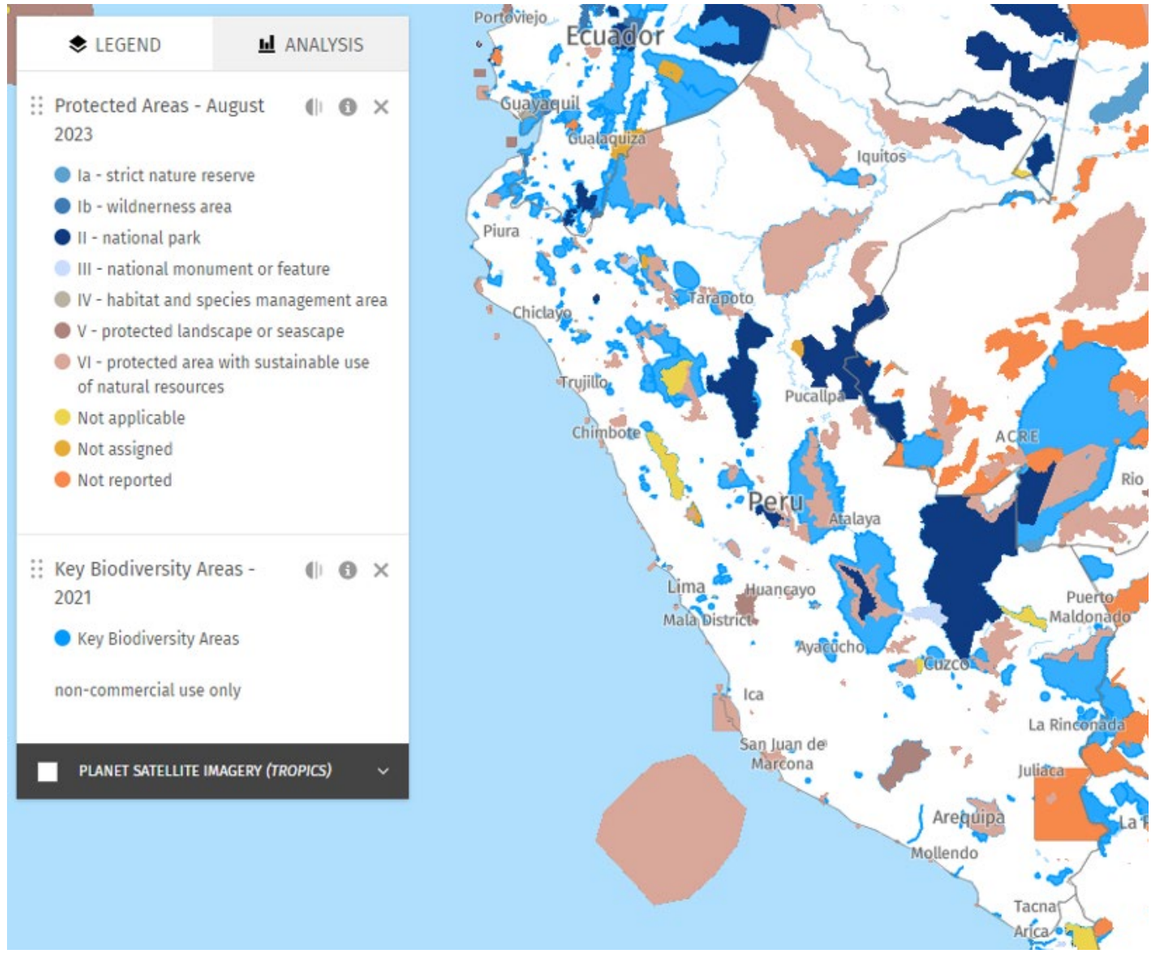

Figure 1. Protected and key biodiversity areas in Peru visualised with the Global Forest Watch tool.

L4: Interface with sensitive locations

According to its ESCC risk management policy, the bank does not lend capital to clients with operations in protected areas (classified as Ramsar Sites, World Heritage Sites or under the IUCN). Clients must confirm this to the bank through a questionnaire, or provide it with the mitigation measures they are taking to manage nature. Additionally, Santander Peru's annual due diligence includes obtaining information from its clients on social conflict, which is verified with data from the Peruvian Ombudsman Office, and in relation to consultations with Indigenous Peoples and Local Communities (IPLCs).

To verify its assets' interface with sensitive locations, Santander Peru used the map it generated through Global Forest Watch in L3. It measured the distance between protected areas and production plants from the selected clients. This step proved invaluable to the bank in verifying clients' compliance with its risk policy.

Sensitive locations

Sensitive locations are defined by the TNFD as:

1. Areas important for biodiversity, including species; and/or
2. Areas of high ecosystem integrity; and/or
3. Areas of rapid decline in ecosystem integrity; and/or
4. Areas of high physical water risks; and/or
5. Areas of importance for ecosystem service provision, including benefits to Indigenous Peoples and Local Communities, and stakeholders.

Next steps

To identify assets in other types of sensitive locations, the bank could explore other layers of the Global Forest Watch tool, such as tree cover change and emerging hotspots. The outcomes of L2 highlight the importance of also identifying assets in areas of high physical water risks, which the bank could explore for L4 using the WRI Aqueduct Water Risk Atlas and the WWF Water Risk Filter.

The bank's risk management team is looking at ways to optimise the collection of data that can feed into its nature-related assessments and TNFD-aligned reporting. As part of the annual due diligence conducted on each organisation in the bank's portfolio, it may request the specific addresses of factories and production plants required for it to undertake L3 and L4. For this first Locate phase, Santander Peru manually searched those locations, a task that proved to be complex and time-consuming. As such, a key takeaway is that having first-hand information from its clients could facilitate the process and support an accurate risk assessment.

Identifying priority locations for the megadiverse South American region

Priority locations include assets in sensitive locations and material locations within financial institutions' portfolios. These locations are the starting-point for evaluating the scale and scope of financial institutions' dependencies and impacts on nature, and assessing their nature-related risks and opportunities; actions related to later phases of LEAP - Evaluate and Assess.

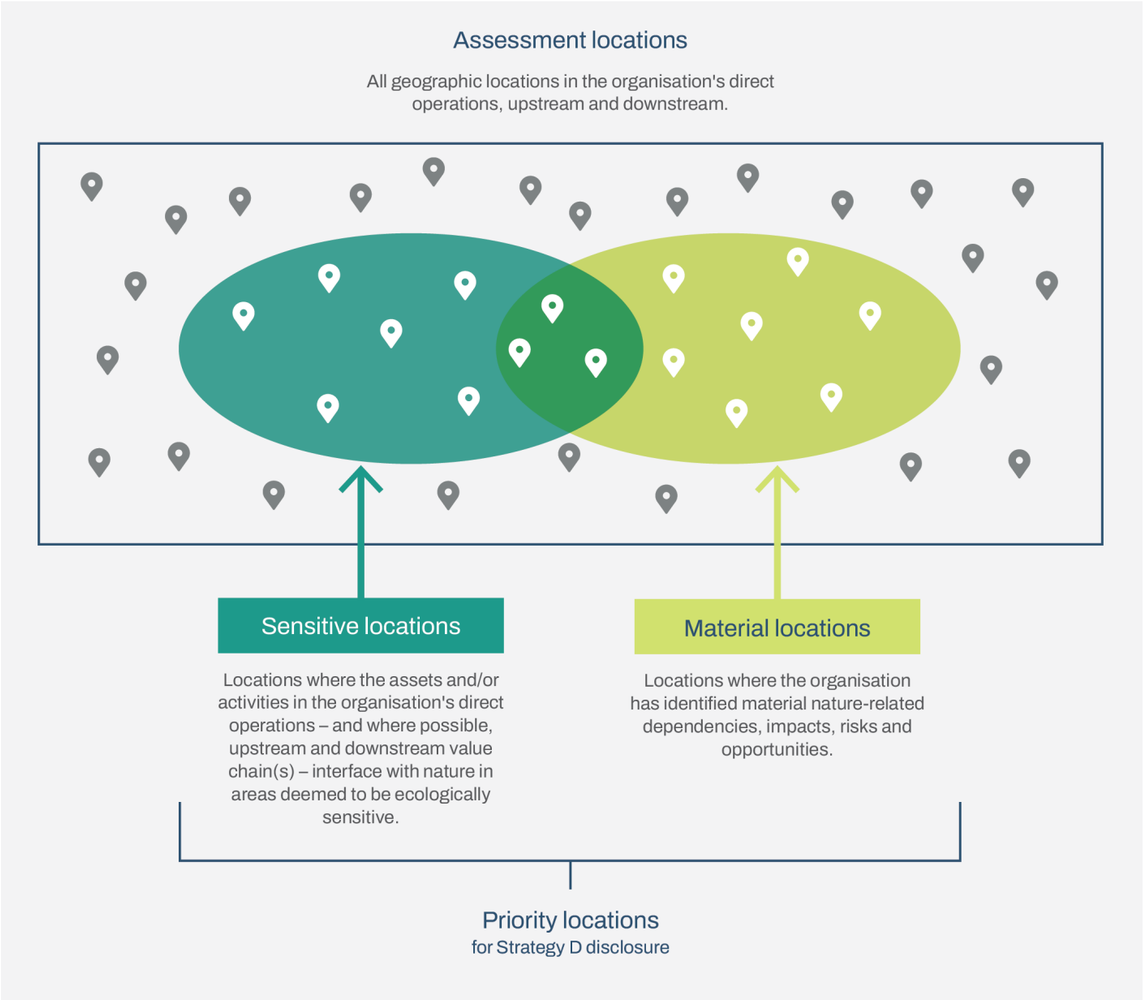

Figure 2. Assessment of priority locations: sensitive and material locations

Financial institutions in megadiverse South American countries may find it challenging to narrow down priority locations, as many of their assets could be in areas that comply with at least one sensitive location criterion. Considering the following points could help with prioritisation:

- A heatmapping exercise in L2 can help to narrow the analysis by prioritising locations of sectors with material impacts and dependencies. ENCORE can support the materiality assessment.
- Having undertaken heatmapping, financial institutions can start to consider what geographies, biomes and ecosystems are relevant to the sectors with high impacts and dependencies within their portfolio. The TNFD provides indicators and metrics for location prioritisation for each biome in its guidance on biomes.
- It is important to analyse all sensitive location criteria, with at least one dataset per criterion. The TNFD's guidance on the LEAP approach, provides a non-exhaustive list of dataset examples per criterion (in Table 4). There may be other relevant reference sources and datasets, including national and regional-level data.
- Stakeholder engagement and judgement is also important to assess whether an asset is located in an area that complies with sensitive location criteria.
- Using additional prioritisation criteria could help determine a subset of locations for further analysis. The additional criteria must be appropriate to the context. For example, Brazilian asset manager JGP developed a method to define locations it would prioritise for initial analysis.
- The LEAP approach is iterative and dynamic. Financial institutions should review again what assets are in areas that meet sensitive locations criteria after completing the next phase, Evaluate, and each time they assess their nature-related issues.

Conclusion

The first step for financial institutions in understanding the exposure of their portfolios to nature-related risks and opportunities is to locate the interface of their assets with nature and identify priority locations. The Locate phase of LEAP provides a structured approach to this. Financial institutions with assets in megadiverse countries may find it challenging to narrow down priority locations, given that a large proportion of these countries may align with at least one sensitive location criterion. It is important to consider additional relevant information to further prioritise locations in South America.

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Hernández-Blanco, M.; Costanza, R.; Anderson, S.; Kubiszewski, I. and Sutton, P. (2020) Future scenarios for the value of ecosystem services in Latin America and the Caribbean to 2050.

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