



# Balancing The Books Of Nature: Techniques For Climate and Biodiversity Accounting

By Divyaasiny R Rajagantham (WWF-Malaysia)

# A wake up call for companies on biodiversity action



## Target 15

Requires transnational companies and financial institutions to **monitor, assess, and transparently disclose risks and impacts on biodiversity** through their operations, portfolios, supply and value chains.

# Assessing biodiversity/ nature is complex...



- No single metric
- Highly location-specific
- Difficult to assign economic value of ecosystem services

# TNFD provides BOTH a disclosure and risk management framework



Taskforce on Nature-related  
Financial Disclosures

## Identification and assessment of nature-related issues

**L**

**Locate**

The interface  
with nature

**E**

**Evaluate**

Dependencies  
& impacts

**A**

**Assess**

Risks &  
opportunities

**P**

**Prepare**

To respond &  
report



## Recommended Disclosures

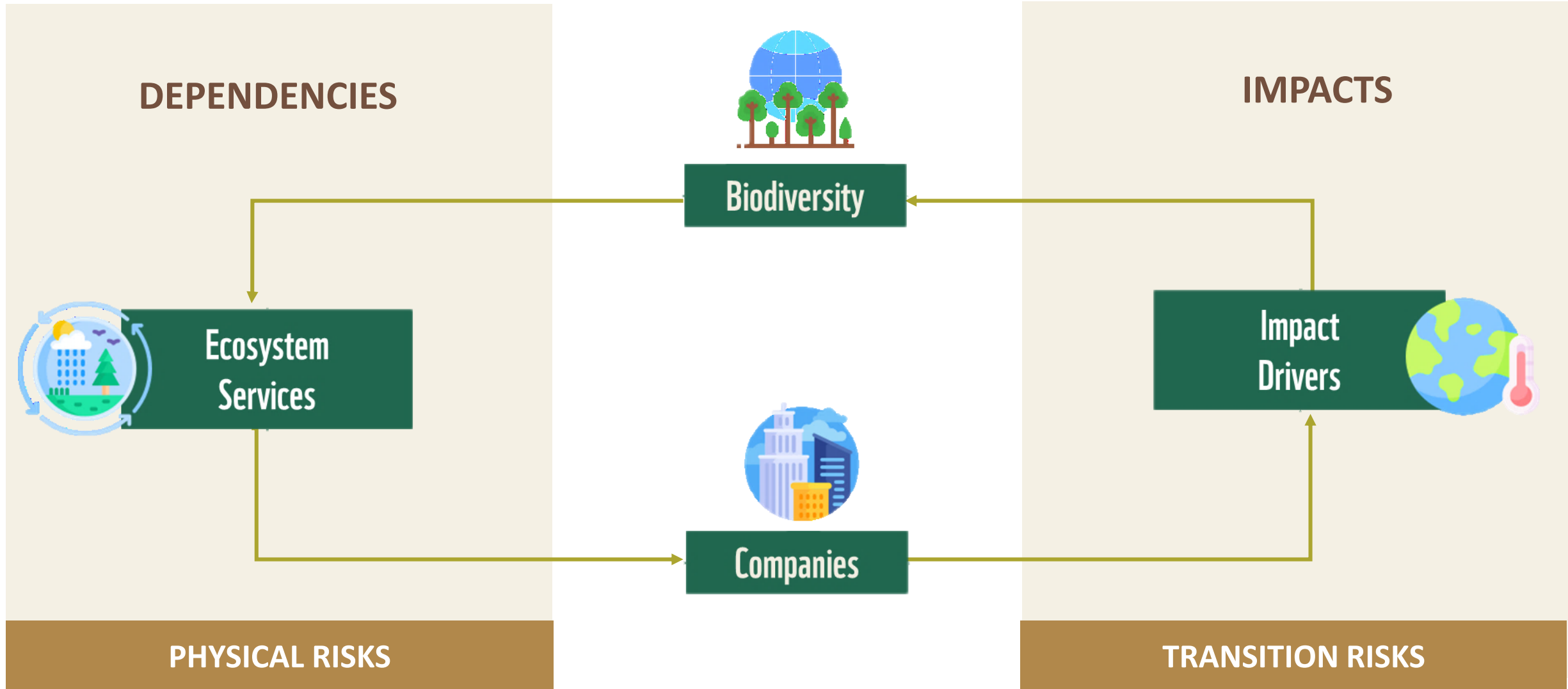
**Governance**

**Strategy**

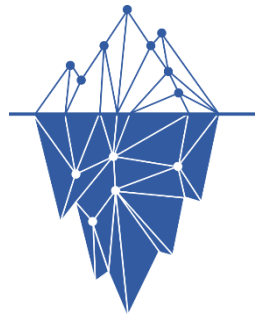
**Risk & impact  
management**

**Metrics & Targets**

# Measuring biodiversity using the concept of double materiality

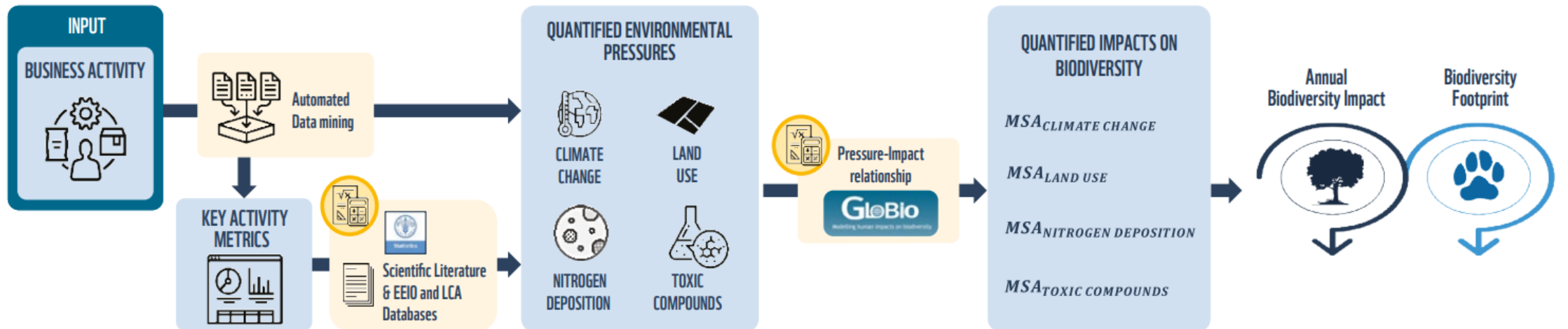


# Quantifying impact on biodiversity - Corporate Biodiversity Footprint (CBF)



Iceberg Data Lab

- Calculates the **biodiversity footprint** of financial institutions
- **Scientifically robust** and includes all **main drivers of biodiversity loss**
- Uses the **Mean Species Abundance (MSA)** metric



## Bottom-up assesment

Corporate activity based on their reported/modelled output

## Life-Cycle Analysis

Using Life Cycle Assessment data allows to quantify the environmental pressures along the entire supply chain

## Normalisation

Impact is calculated on financial ratios allowing crosscomparisons

# Applications of biodiversity footprint in the real world



**BNP PARIBAS**



## HSBC World ESG Biodiversity Screened Equity UCITS ETF

Part of our sustainability equation

HSBC's first biodiversity screened ETF which provides investors with the opportunity to **build biodiversity 'risk aware' considerations into their portfolios**. The ETF uses a biodiversity screening methodology which builds upon the CBF.

# Biodiversity Risk Filter (BRF) provides a first step to assess biodiversity



Link to the BRF Tool:



<https://riskfilter.org/>



## Purpose

Corporate-level screening  
& prioritisation

Aligned with TNFD &  
SBTN



## Ease of Access

Open-source

Web-based

Over 80 key data sets  
translated into company-  
relevant terms



## Scope

Covers all industries

Spatially explicit



# 4 key functionalities of the WWF BRF



## Why to act?

## Where to act?

## How to act?

### INFORM

#### Industry materiality

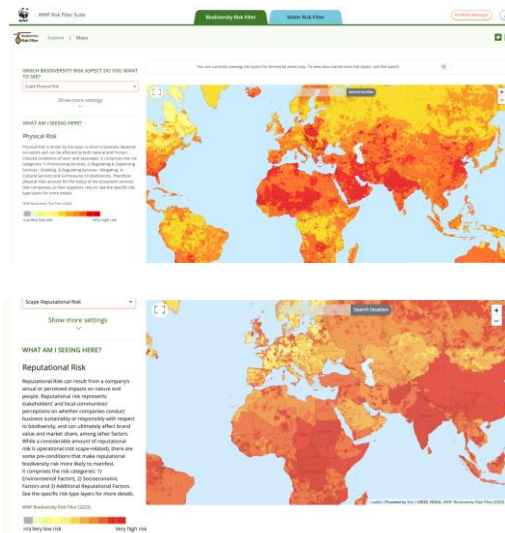
Explore different industry sector's dependencies on ecosystem services and impacts on biodiversity



### EXPLORE

#### Biodiversity risk heat-maps

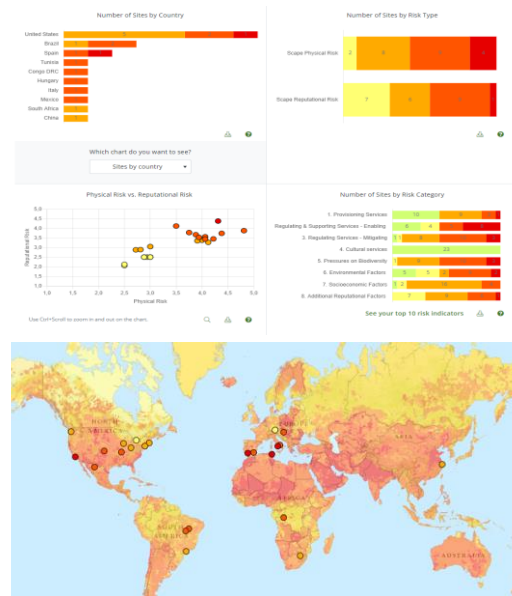
Shows high-risk regions across activities to enable focus on higher-risk locations.



### ASSESS

#### Biodiversity risk rating

Combines industry materiality rating and local biodiversity importance to provide risk scores and prioritize areas for action



### RESPOND

#### Response measures

Provides suitable response actions per and across locations based on risks and opportunities



# Case study: Applying BRF to portfolio analysis of MSCI ACWI companies



- Assessed a portfolio of 605 MSCI ACWI companies and their respective 7,629 global operational sites,
- Spanning 24 industry sectors

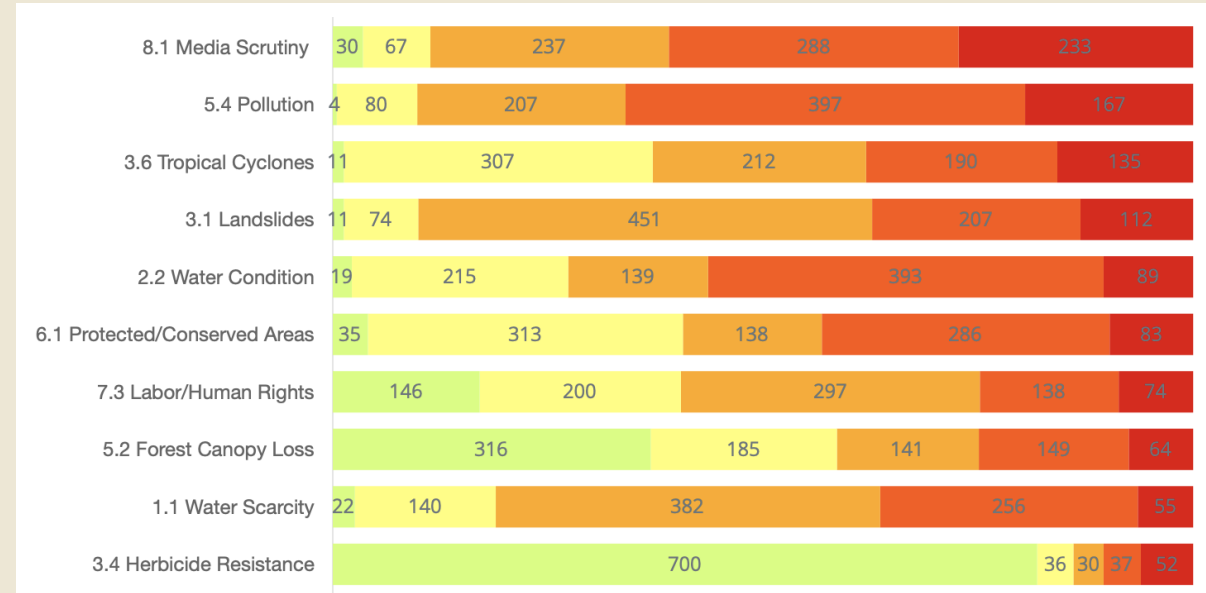
## Portfolio-level results

Number and percentage of total companies in the sample portfolio by physical and reputational risk score

Risk score		Physical risk		Reputational risk	
		Nr. of companies	% of companies	Nr. of companies	% of companies
1.0 - 1.4	very low risk	0	0.00%	0	0.00%
1.4 - 1.8		0	0.00%	0	0.00%
1.8 - 2.2	low risk	0	0.00%	0	0.00%
2.2 - 2.6		2	0.33%	5	0.83%
2.6 - 3.0	medium risk	151	24.96%	137	22.64%
3.0 - 3.4		250	41.32%	313	51.74%
3.4 - 3.8	high risk	141	23.31%	99	16.36%
3.8 - 4.2		34	5.62%	30	4.96%
4.2 - 4.6	very high risk	16	2.64%	19	3.14%
4.6 - 5.0		11	1.82%	2	0.33%

➤ Allows to **prioritise high risk companies** for company and site level deep dive on the risk exposure

Number of companies by top 10 risk indicators (not from the case study, just for illustrative purpose)



➤ Allows to **prioritise key biodiversity topics** across portfolio companies

# Case study: Applying BRF to portfolio analysis of MSCI ACWI companies



## Industry-level results

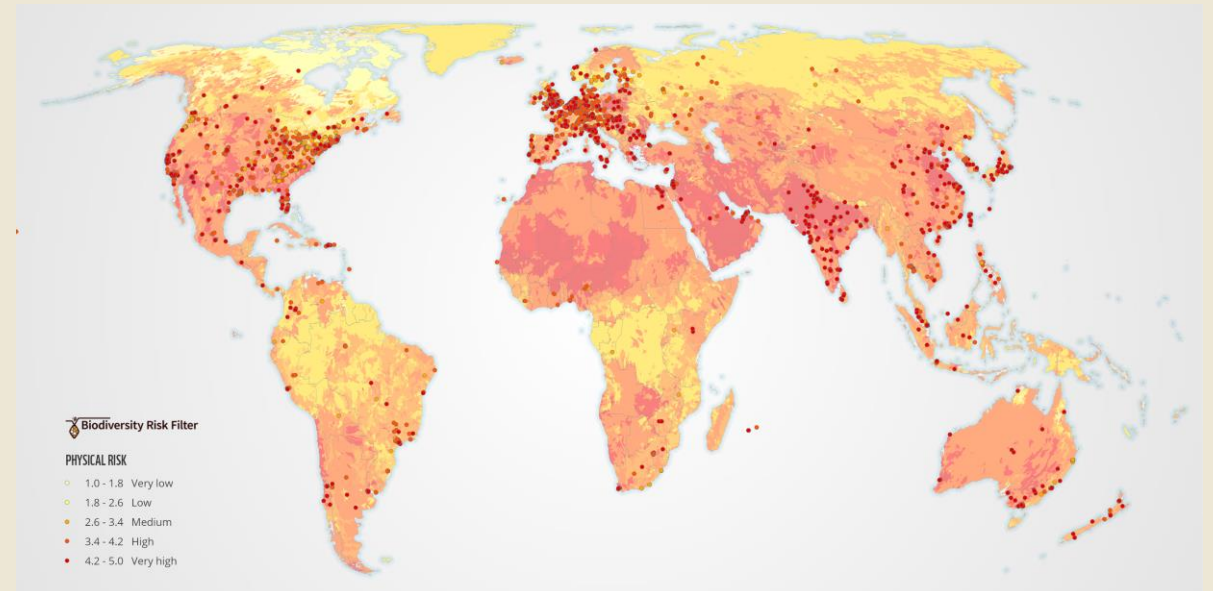
Average industry risk score (physical and reputational) and percentage of total portfolio per industry

Industry (WWF Risk Filter sector classification)	Physical risk score	Reputational risk score	Percentage of total sample portfolio
Agriculture (animal products)	3.8	3.5	3.7%
Agriculture (plant products)	3.9	3.7	4.4%
Appliances & General Goods Manufacturing	2.7	2.8	7.3%
Appliances & General Goods Manufacturing	2.9	3	6.7%
Construction Materials	3.6	3.1	5.4%
Electric Energy Production - Solar, Wind	3	2.9	4.7%
Electronics & Semiconductor Manufacturing	2.6	2.7	7.0%
Fishing and aquaculture	3.8	3.3	2.6%
Food & Beverage Production	3.2	3.1	8.2%
General or Speciality Retailing	2.8	2.3	6.7%
Health Care, Pharmaceuticals and Biotechnology	3.2	2.7	6.8%
Hospitality Services	3.4	3.1	3.9%

- Allows to identify the **industries with the highest physical and reputational risk scores**

## Company-level results

Global mapping of physical risk scores of all sites of the sample portfolio analysed (each dot presents a specific company site)



- Allows to identify **companies with the highest reputational and/or physical risk exposure** within the portfolio
- Allows to identify **the geographical distribution of the companies' risk exposure**

THANK YOU



Working to sustain the natural world for the benefit of people and wildlife.

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