



GOOD
GROWTH
PARTNERSHIP

UNEP
FINANCE
INITIATIVE

Deforestation Risks for Banks

Module 1

Overall Module Structure

Modules

01

Introduction to deforestation and business case

Learners should be able to:

- ❖ Understand global deforestation context, sustainability issues in commodity supply chains and why it matters to banks
- ❖ Understand risks associated with financing agricultural commodity production and trade

03

Managing financial risk and exploring opportunities

Learners should be able to:

- ❖ Understand mitigation actions that banks can take to reduce their deforestation-related risks.
- ❖ Understand various opportunities and production innovation to support sustainable commodities production.

02

Risk Identification, Screening and Assessment

Learners should be able to:

- ❖ Describe how deforestation-related risks fits within the traditional risk management framework
- ❖ Understand where different deforestation-related assessment tools fall within risk management stage and how to use them.

04

Nature-Based Solutions (NbS)

Learners should be able to:

- ❖ Understand how NbS can be used to mitigate land use risk
- ❖ Understand how NbS can be an investment opportunity for banks

Presenters



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Module 01

Introduction to Deforestation Risks

Dependency on nature and nature risks

Deforestation in context

Deforestation commitments

Impacts and risks of agricultural commodities

Objectives

Audience

- ❖ Relevant for bank officers working with credit and loans, trade finance and project finance.

LEARNING OBJECTIVES

- ❖ Understand global deforestation context and why it matters to banks
- ❖ Understand sustainability issues in commodity supply chains
- ❖ Describe the relationship between banks, agriculture commodities, and natural capital
- ❖ Understand risks associated with financing agricultural commodity production and trade



Section 01



Introduction to Deforestation Risks

Dependency on nature and nature risks

Deforestation in context

Deforestation commitments

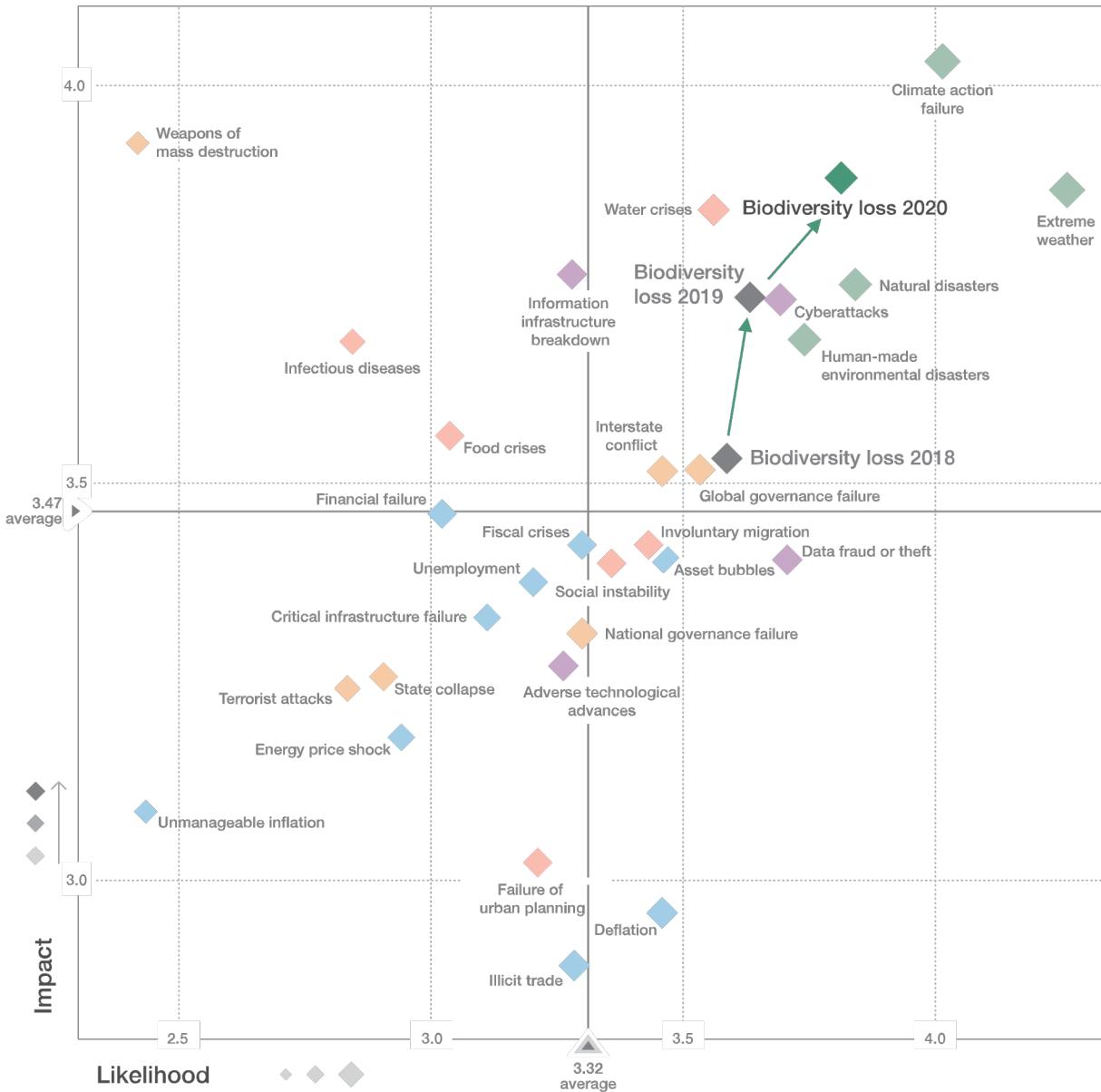
Impacts and risks of agricultural commodities



Biodiversity risks to business on the rise

- ❖ World Economic Forum's Global Risks Report 2020 indicates that the **top 5 risks are environmental ones**, including biodiversity loss and climate action failure. In the 2022 report, Biodiversity loss is ranked among the **top 3 most severe risks**.
 - ❖ **Biodiversity loss** is perceived as the 4th most likely and the 3rd most impactful (**rising year on year**)
 - ❖ **Some sectors are more vulnerable** than others due to greater dependency on nature

Source: *Nature Risk Rising* (WEF, 2020)





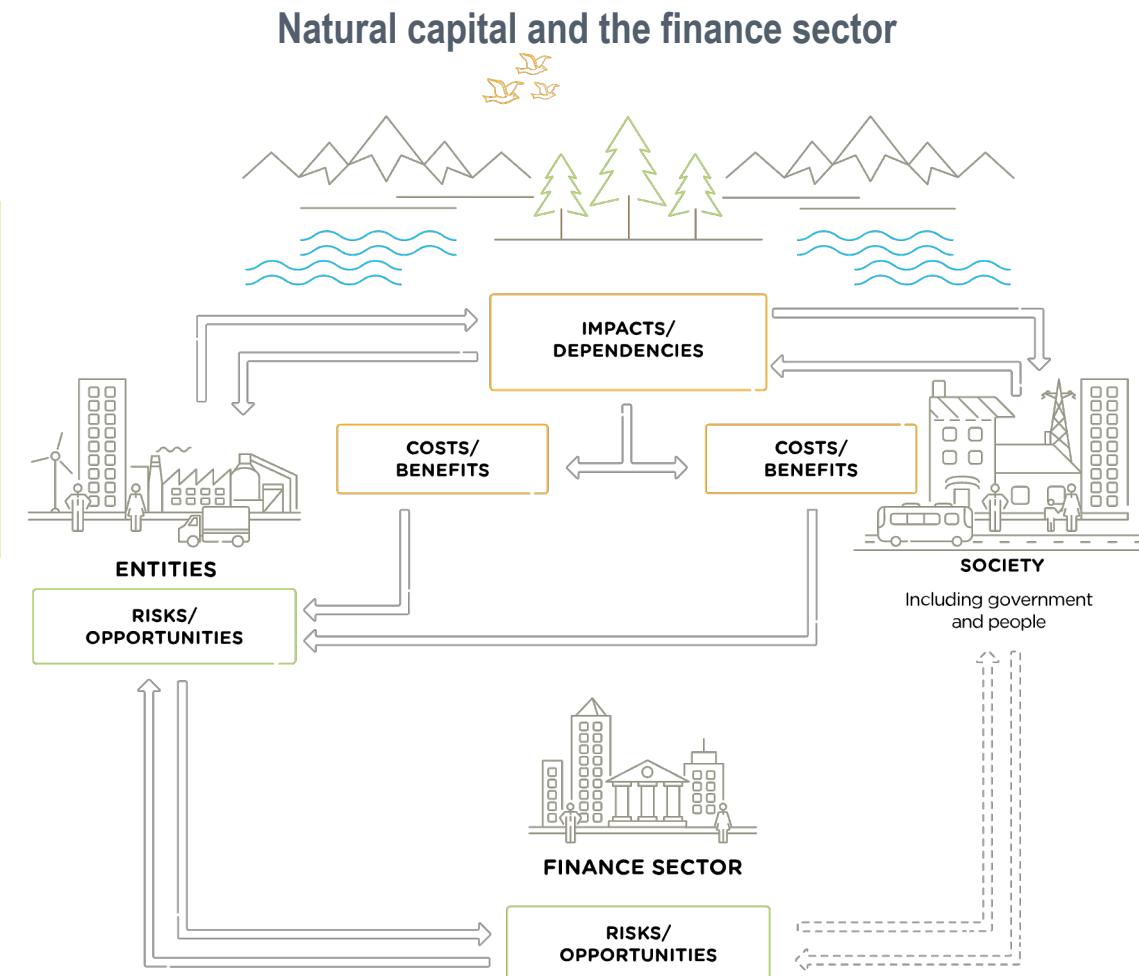
Thinking about impacts and dependencies on nature

What is Natural Capital?

The stock of renewable and non-renewable natural resources (e.g., plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits to people. These benefits are commonly known as ecosystem services or abiotic services.

Most, if not all, commercial services financed by banks **depend or impact on nature**, thus creating a **risk** – particularly to those industries that are heavily dependent on nature for their provision of services.

Source: [Natural Capital Coalition \(2018\)](#)





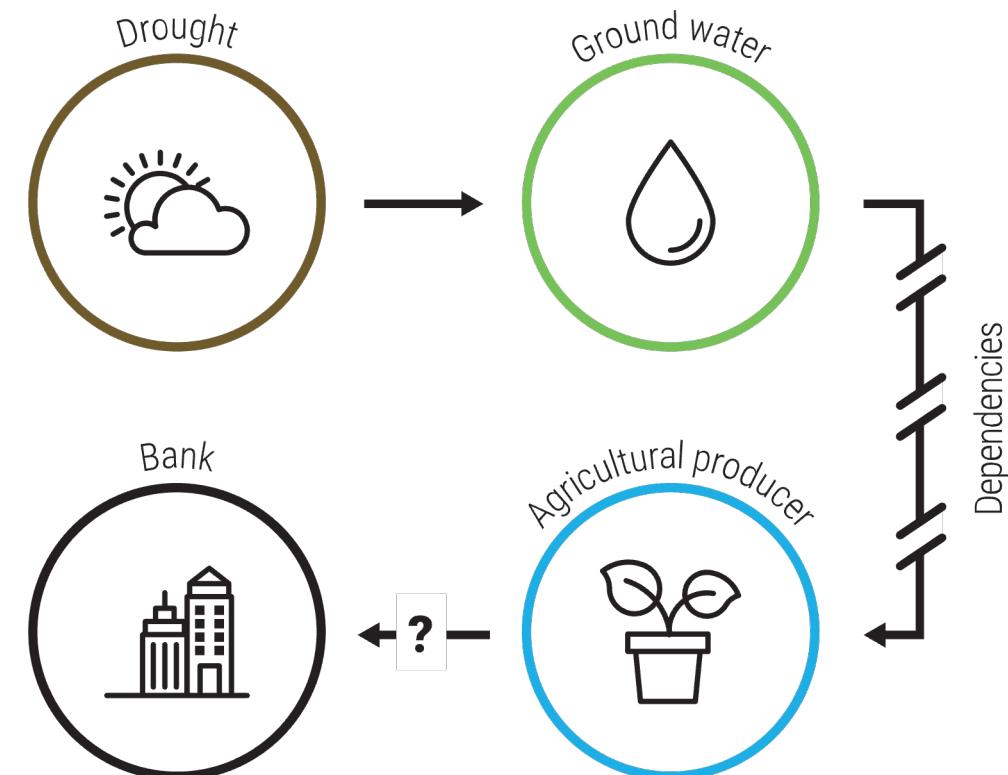
Why are nature risks rising?

- ❖ Human activities that impact nature, (e.g. deforestation or pollution or indirect such as climate change), are depleting natural capital at an accelerating rate.
- ❖ This affects nature's capacity to continue providing the ecosystem services on which the economy depend on.
- ❖ This can trigger disruptions to economic activities, presenting a potential financial risk to those industries and their financiers.

Source: [Natural Capital Finance Alliance and PwC \(2018\)](#)

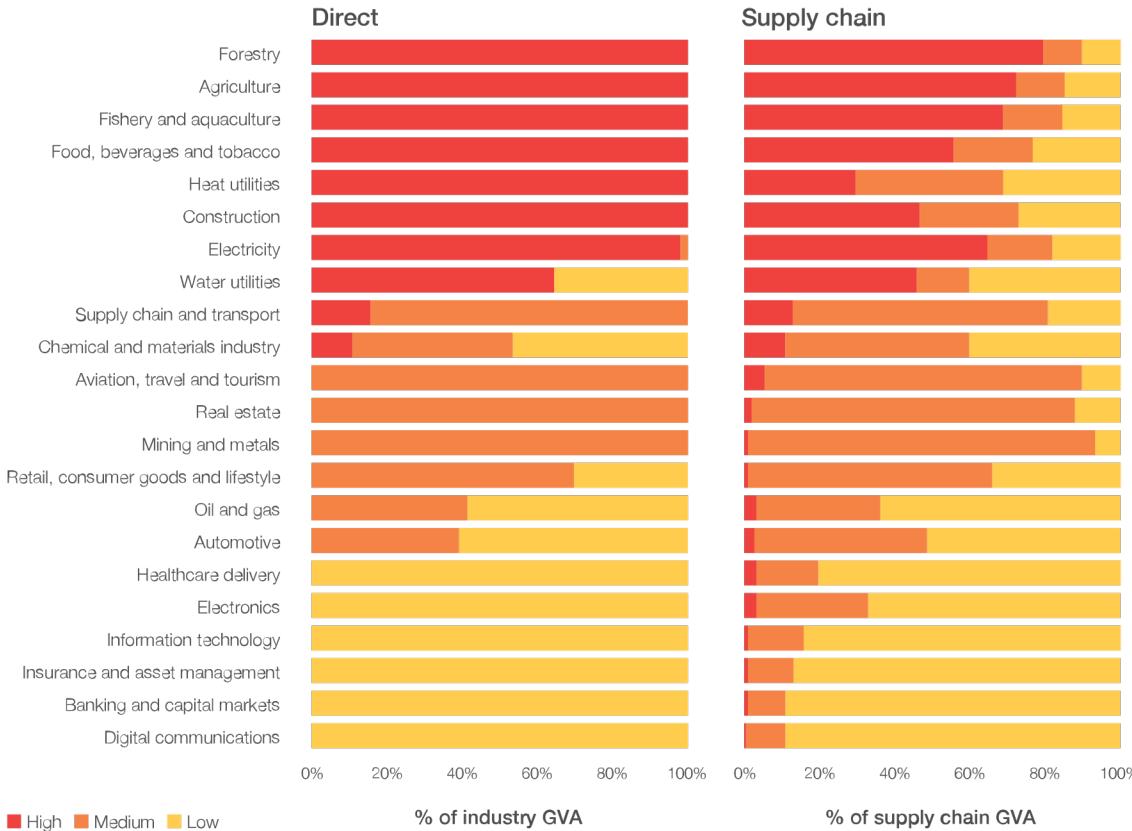


Example of disruption risk potentially affecting a financial institution





Dependency on nature by industry



All businesses depend on natural capital assets and ecosystem services either directly or through their supply chains.

The three largest sectors that are highly dependent on nature (construction, agriculture, and food and beverages) generate close to **USD 8 trillion of gross value added (GVA)**. This is roughly twice the size of the German economy.

As nature loses its capacity to provide such services, these sectors could suffer significant losses.

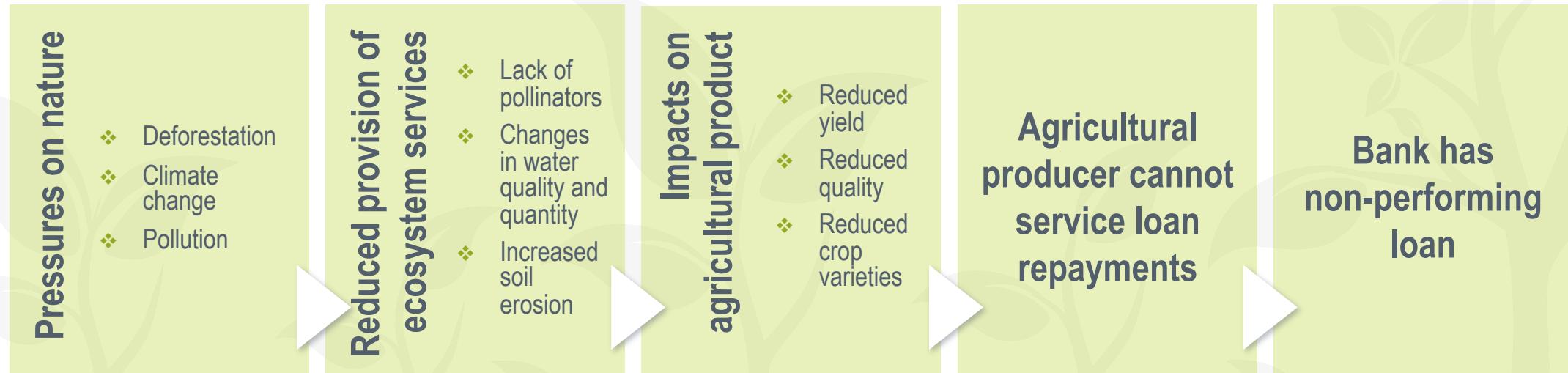
Source: [World Economic Forum \(2020\)](#)



Natural Capital Risks

Banks are exposed to natural capital risks that affect the businesses that they lend to.

The following flow diagram highlights how pressures on nature can transpire to a financial risk for a bank:

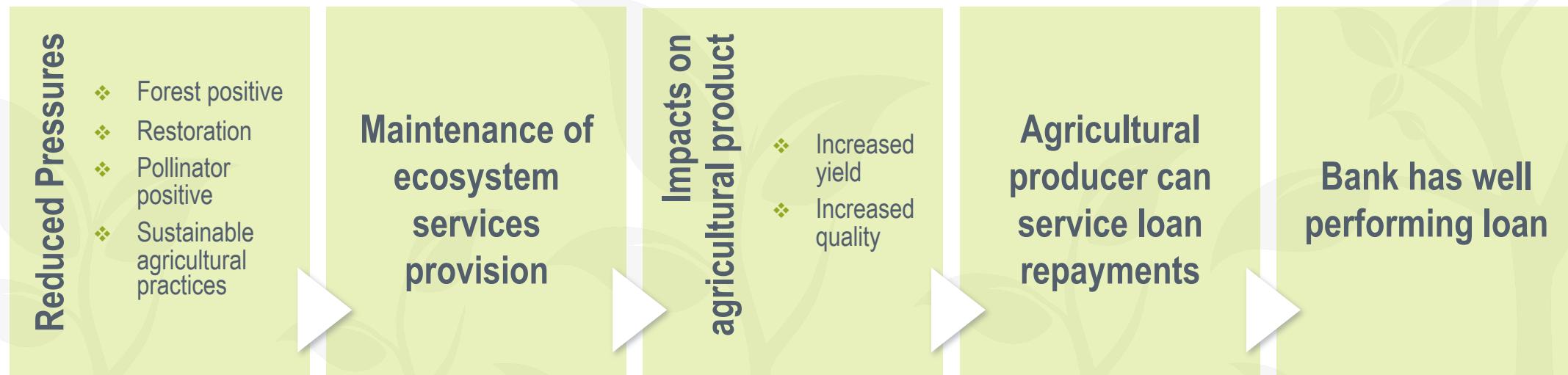




Natural Capital Opportunities

Financial institutions can overcome their natural capital risks by addressing the pressures exerted on nature.

The following flow diagram highlights how a bank can turn natural capital risk into an opportunity where actions towards nature can transpire to a financial opportunity for a bank:





Summary



- ❖ Most, if not all, commercial services depend on nature. Banks are exposed to natural capital risks that affect the businesses that they lend to.
- ❖ Interruptions to production and distribution of goods and services have surged due to nature risks.
- ❖ As nature loses its capacity to provide such services, sectors highly dependent on nature could suffer significant losses.
- ❖ Nature loss equals economic loss and is thus a financial risk.

Section 02



Introduction to Deforestation Risks

Dependency on nature and nature risks

Deforestation in context

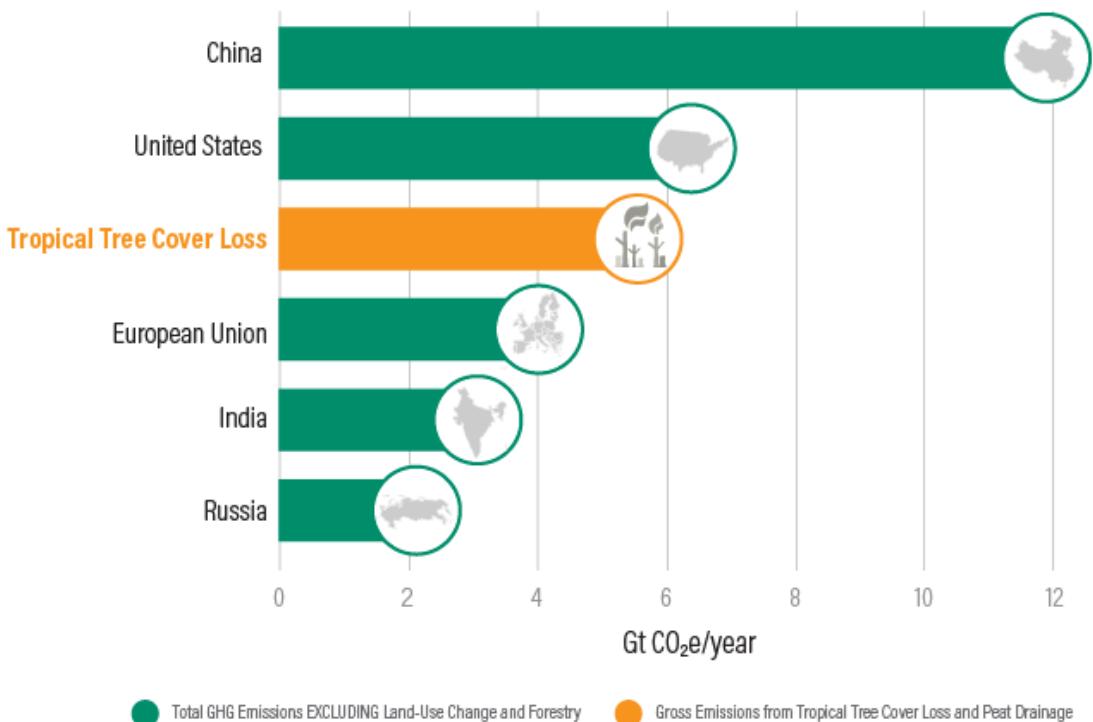
Deforestation commitments

Impacts and risks of agricultural commodities



Deforestation: a primary threat to biodiversity

If Tropical Deforestation were a Country,
it would Rank Third in CO₂e Emissions



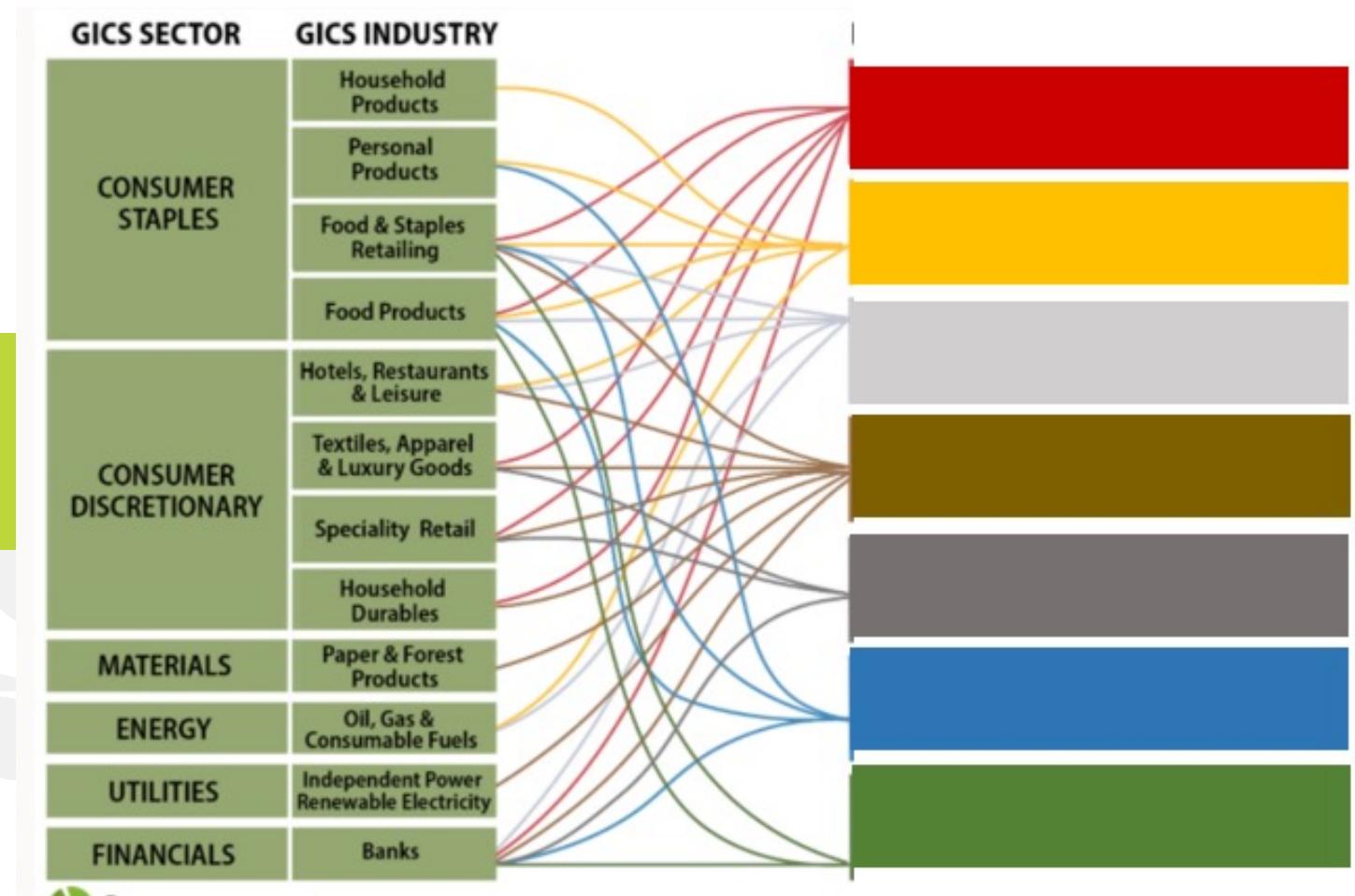
- ❖ Avoiding deforestation and protecting of forests is critical to meet the **Paris Agreement**, keep global warming below 2°C and to reach the Sustainable Development Goals.
- ❖ ~ 2.6 billion tonnes of carbon dioxide, equivalent to one third of the CO₂ released from burning fossil fuels, is absorbed by forests every year ([IUCN, 2020](#))
- ❖ Forest ecosystems hold **80% of terrestrial biodiversity**
- ❖ During 2015–2020, the global rate of deforestation was **10 million hectares per year** ([FAO, 2020](#))
- ❖ “**Agricultural expansion continues to be the main driver of deforestation** and forest fragmentation and the associated loss of forest biodiversity” ([FAO, 2020](#))
- ❖ **Deforestation is a key source of nature-related risks to companies that depend on (or cause impact to) tropical regions**

Source: [Seymour & Busch, 2016](#).



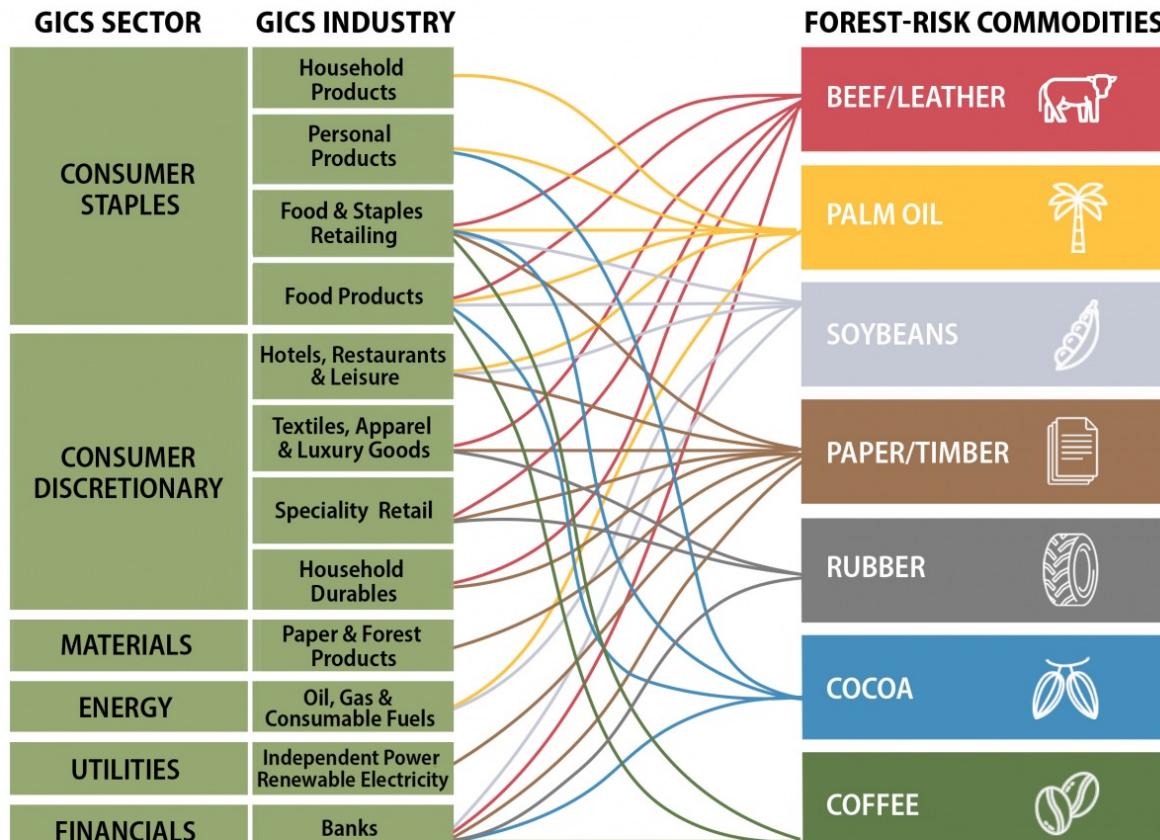
Quiz

What do you think are the 7 high risk forest risk commodities?





The “forest risk commodities”



 Ceres
Sustainability is the bottom line.

- ❖ 40% of global deforestation is driven by commodity production ([Hosonuma et al., 2012](#)), especially soy, palm oil, beef and timber.
- ❖ The pervasive use of forest risk commodities, including derivatives, means that **supply chains in different sectors are exposed to deforestation risk**
- ❖ China is the biggest export market for forest-risk commodities, followed by the EU ([Trase, 2020](#))



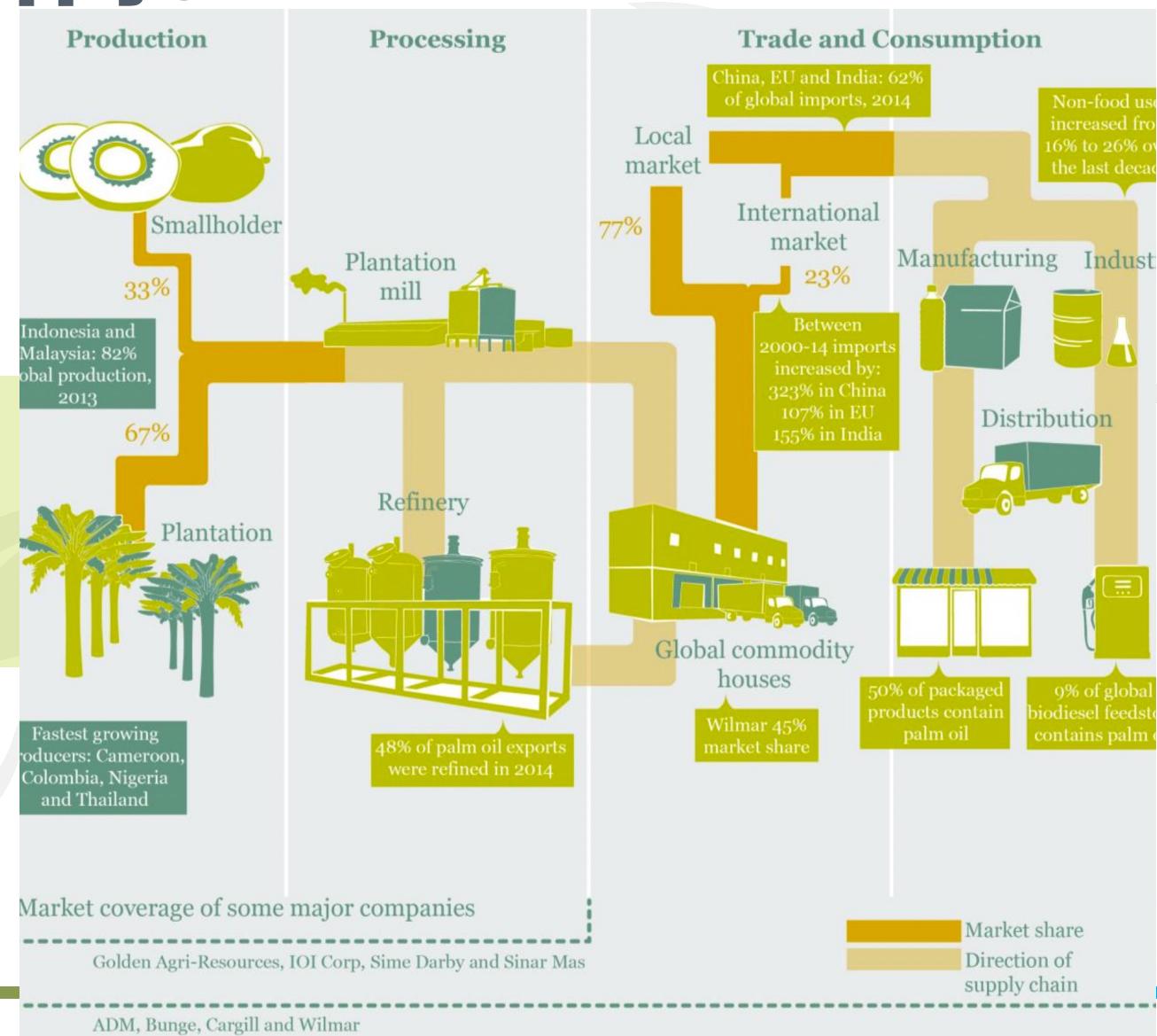
Spotting the Risk within Supply Chains: Palm Oil Example

Where do deforestation risks lie within this supply chain?

Why does this matter to you?

The risk for banks may arise through different stages of the palm oil supply chain as this is dependent on **where** and **which** clients you are financing.

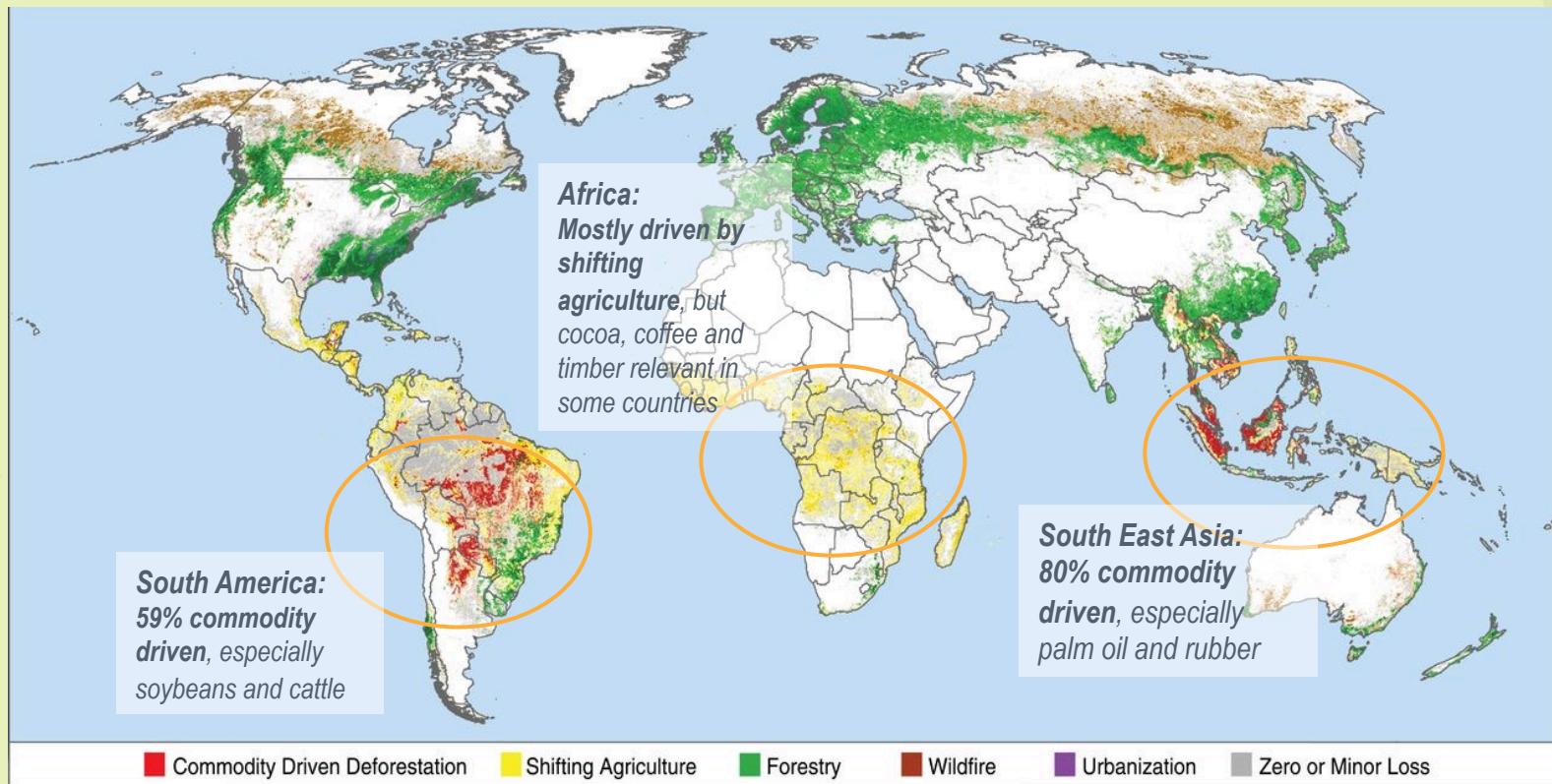
Source: [Chatham House, 2016](#)





Primary drivers of forest cover loss for the period 2001 to 2015

The location of where your clients are based and where they are sourcing from is important



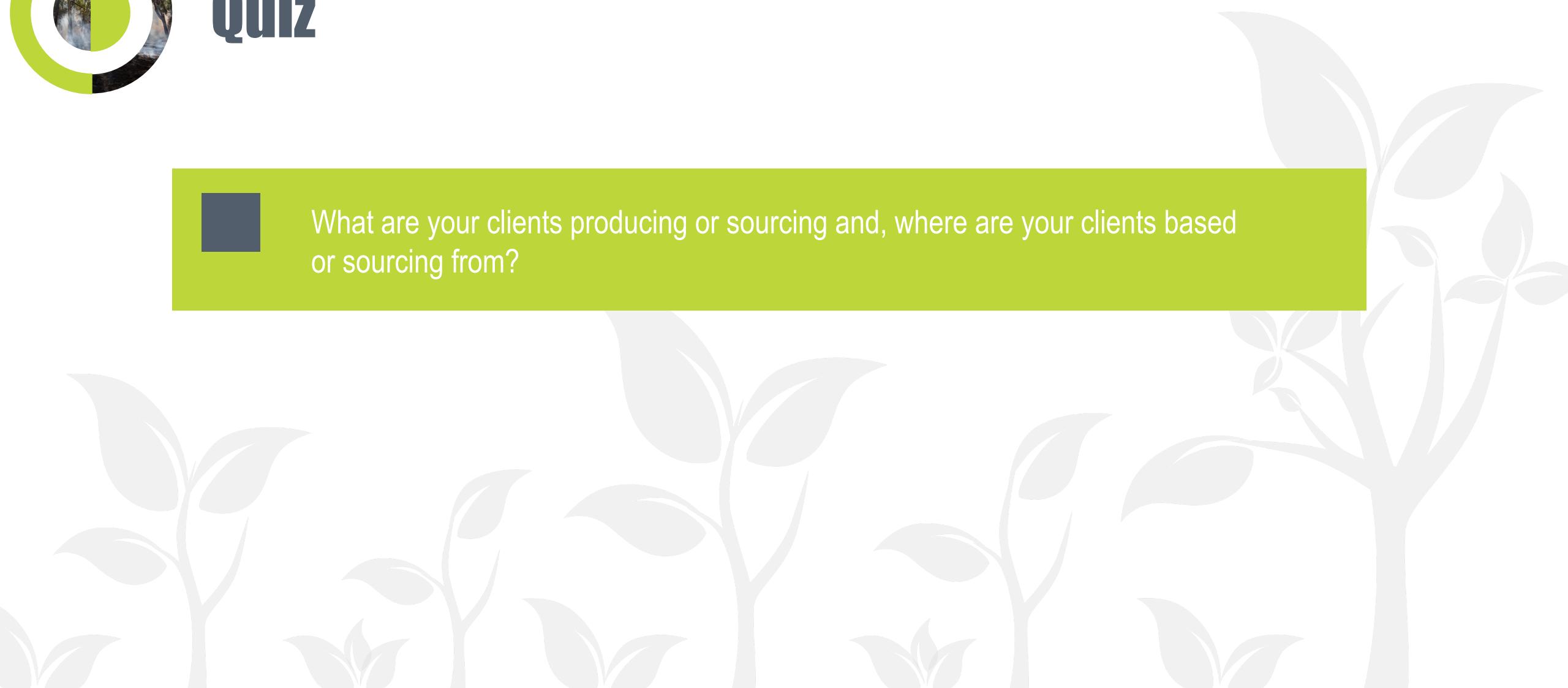
Source: Curtis et al., 2018, [GFW, 2020](#)



Quiz



What are your clients producing or sourcing and, where are your clients based or sourcing from?

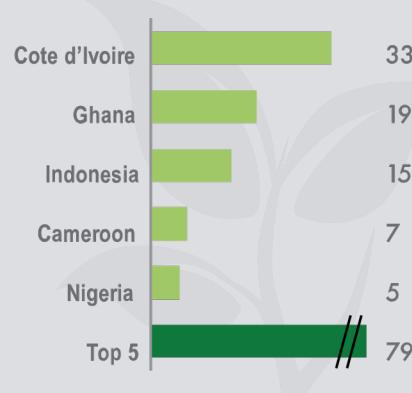




Top 5 producing countries of key forest risk commodities



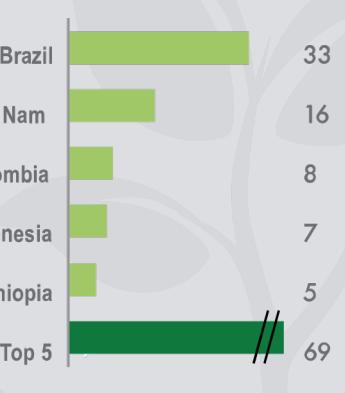
COCOA



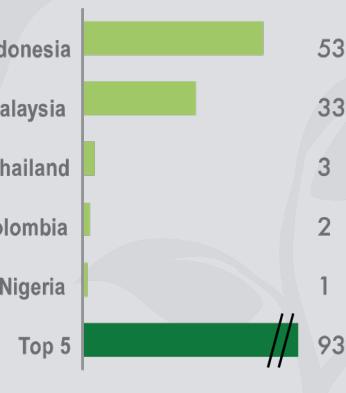
CATTLE^{II}



COFFEE



PALM OIL



SOYBEAN



WOOD PULP^{III}



Source: [TFA, 2019](#)



How this matters to banks?

- ❖ Banks have considerable indirect ecological footprint linked to clients they finance. This might lead to financial risks.
- ❖ Deforestation risks are not only restricted to producers, they spread through out the supply chains of forest risk commodities and can impact banks through stranded assets, non-performing loans, and profitability.
- ❖ For example, in Southeast Asia, bank lending represents 66% of financing to forest risk commodity supply chains (CDP, 2019).
- ❖ In Latin America, another region of interest in the context of deforestation, agriculture is an important economic sector across most countries.



Source: forestsandfinance.org/



Regulatory trends: spotlight on forests

- ❖ In commodity importing countries, embedded deforestation concerns are likely to reflect on:
 - ❖ New EU policy on deforestation
 - ❖ Trade deals (e.g., EU-Mercosur)
 - ❖ Due diligence requirements (e.g. UK Environment Bill)
 - ❖ Financial market regulation (e.g., EU Taxonomy)
 - ❖ Mandatory non-financial reporting
 - ❖ Stock exchange listing requirements
- ❖ In producer countries, implementation of regulatory targets will be key (e.g., Brazilian Forest Code and mandatory ISPO certification in Indonesia)
- ❖ Calls for improved regulatory framework to create a level playing field (e.g. TFA's Collective Action Agenda)

The screenshot shows a news article from the European Parliament's Press room. The title is "Climate change: new rules for companies to help limit global deforestation". The article is dated 13-09-2022 at 12:41. It includes social media sharing icons for Facebook, Twitter, LinkedIn, and WhatsApp. Below the article, there is a section titled "Consultation on due diligence on forest risk commodities" with a numbered list of points.

News
European Parliament

Headlines ▾ Press room ▾ Agenda ▾ FAQ

Press room / Climate change: new rules for companies to help limit global deforestation

Climate change: new rules for companies to help limit global deforestation

Press Releases PLenary Session ENVI 13-09-2022 - 12:41

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An area larger than the EU was lost to deforestation consumption representing around 10% of losses
Parliament also wants pigmeat, sheep and goats printed paper products covered by the new rules
Human rights and the rights of indigenous people

.....

Department for Environment Food & Rural Affairs

Due Diligence Consultation Sustainable Commodities Team Department for Environment, Food and Rural Affairs Due.Diligence@defra.gov.uk
www.gov.uk/defra

25 August 2020

Dear Consultee

Consultation on due diligence on forest risk commodities

- I am writing to invite your views on introducing legislation that is designed to prevent forests and other important natural areas from being illegally converted to agricultural land. Our proposal would make it illegal for larger businesses to use forest risk commodities that have not been produced in accordance with relevant local laws, and they would need to undertake due diligence to show that they have taken proportionate action to ensure this is the case.



Market trends: transition to ethical supply chains

- ❖ Consumption of forest risk commodities will continue to increase and the production area will inevitably expand (e.g., arable land is expected to grow 35% in South America by 2050 according to the [FAO](#)).
- ❖ More than 400 companies globally have made commitments to deforestation-free supply chains: a response to deforestation risks
- ❖ Transition to a deforestation free economy has been slow: continued pressure on companies that made 2020 zero deforestation pledges, investors are currently looking at this but transition for banks have been slower.
- ❖ Market is likely to focus more on landscape/jurisdictional approaches to commodity sourcing → potential to reduce demand for commodities in areas with low environmental performance.
- ❖ Big Four accounting firms (Deloitte, PwC, EY, KPMG) unveiled a reporting framework for environmental, social, and governance standards for companies.

"BlackRock Inc. and BNP Paribas SA are among the financial institutions pushing consumer companies to more comprehensively incorporate the substantial financial risks from deforestation in their climate-risk models." [S&P Global, June 2020](#)



Societal trends: greater awareness, greater scrutiny

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Greater bank transparency is key to stop funding dangerous deforestation

Emily Krone, Global Director, Capital Markets, and Mariana Gilmore, Global Director, Events

BANKTRACK

BANKS | DODGY DEALS | MAP | CAMPAIGNS

END THE BIG BUSINESS OF BURNING

End the Big Business of Burning!

Banks have promised to end their relationship with the rainforest destruction of big businesses by 2020, yet some of the largest remaining forested areas on the planet are on fire. Take action!

Bloomberg Law

BROWSE Environment & Energy Report Advanced Search Go Login

Banks Direct \$154 Billion to Firms Responsible for Deforestation

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The deforestation risks lurking in the banking sector

FOREST 500 A PROJECT OF GLOBAL CANOPY Rankings Data Insights Publications About

Nearly 100 financial institutions risk funding deforestation with \$2.7 trillion

26 January 2021

ABOUT US DONATE SEARCH COUNTRIES LANGUAGES

global witness

Article / Sept. 23, 2019

MONEY TO BURN

More than 300 banks and investors back six of the world's most harmful agribusinesses to the tune of \$44bn



The move towards deforestation-free finance

Banks are beginning to understand sustainability as strategic, focusing on risk measurement, assessing new business opportunities, and addressing stakeholders' concerns.

- **Principles for Responsible Banking**
 - A unique framework for ensuring that signatory banks' strategy and practice align with the **Paris Agreement** and **Sustainable Development Goals**.
- **The Soft Commodities Compact**
 - A company-led initiative that worked with the banking industry to help transform commodity supply chains and help the banks' clients (companies) achieve zero net deforestation.
 - The 12 banks involved have achieved some progress in their anti-deforestation policies, monitoring and reporting but there is still a long way to go
- **The Land Use Finance Programme**
- **Tropical Finance Alliance Collective Action Agenda**





Progress so far

Forest 500 assesses 350 of the most influential companies in key forest-risk supply chains and 150 financial institutions which provide the most finance to those companies.

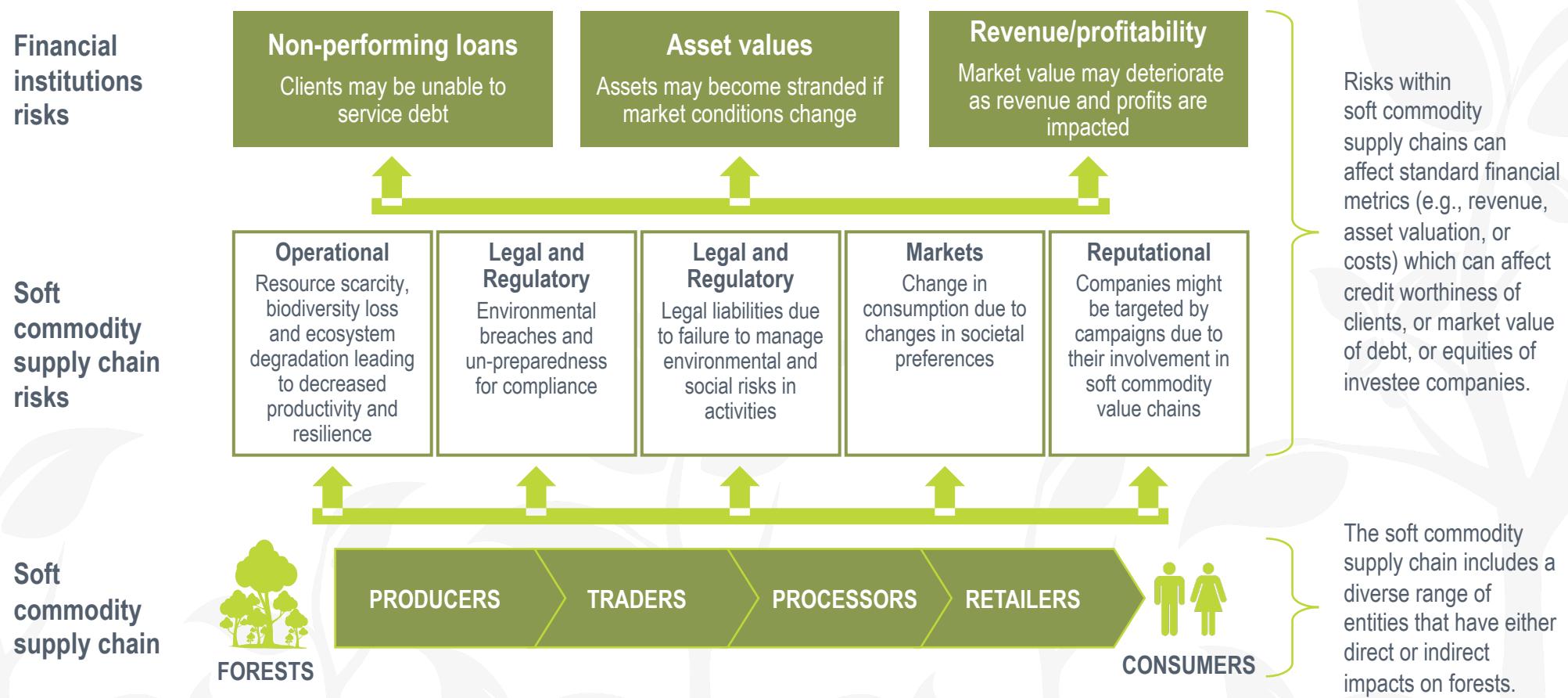
Key findings have highlighted movement towards deforestation-free finance:

- Since 2019, 22 financial institutions have published a new commodity specific deforestation policy, namely focussed on timber (14) and palm oil (10, followed by soy (9) and cattle production (4) ([Forest 500, 2021](#))
- Of 150 financial institutions assessed, 32% of them had at least one commodity specific policy in 2019, which increased to 37% in 2020 ([Forest 500, 2021](#))

Although financial institutions have made progress towards deforestation free finance, there are several steps involved within the pathway towards a deforestation free supply chain.



Summary of deforestation risk for banks



Source: [Bank and Investor Risk Policies on Soft Commodities](#)



Summary



- ❖ Global commodity production (palm oil, beef, soy, etc.) is the primary cause of deforestation creating a risk to banks financing throughout the agricultural supply chain.
- ❖ These risks include **non-performing loans, stranded assets, deterioration of profitability**.
- ❖ Knowing **what commodity** your client is producing or sourcing, and **what country or region**, can highlight potential **deforestation risks** for your bank

Section 03

Introduction to Deforestation Risks

Dependency on nature and nature risks

Deforestation in context

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Impacts and risks of agricultural commodities



Companies response to deforestation risk



Forest-related commitments by companies are growing, but implementation actions are lagging, exposing them and their financiers to risk. Banks can encourage or require companies to make and implement these commitments to mitigate these risks.

Source: [Forest500, 2018](#)



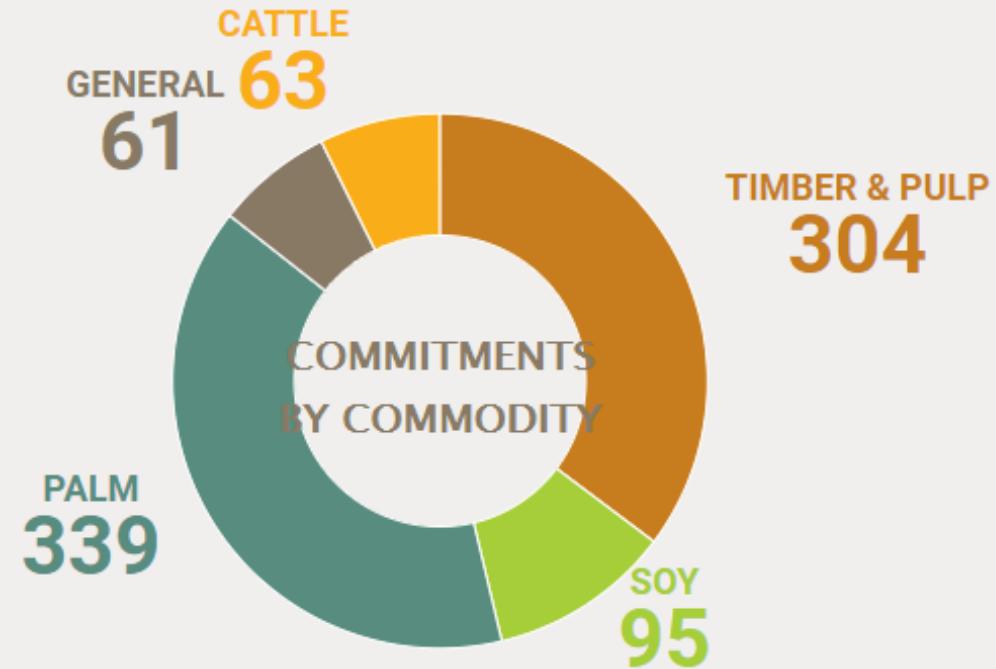
Companies response to deforestation risk

The number of commodity-related deforestation commitments by companies per commodity ([SupplyChange, 2021](#))

Source: [SupplyChange, 2021](#)

Certified Area (Hectares)	Export Value of Commodities from Deforestation (USD)*	Entities Profiled
185,252,343	\$96.8 billion	498

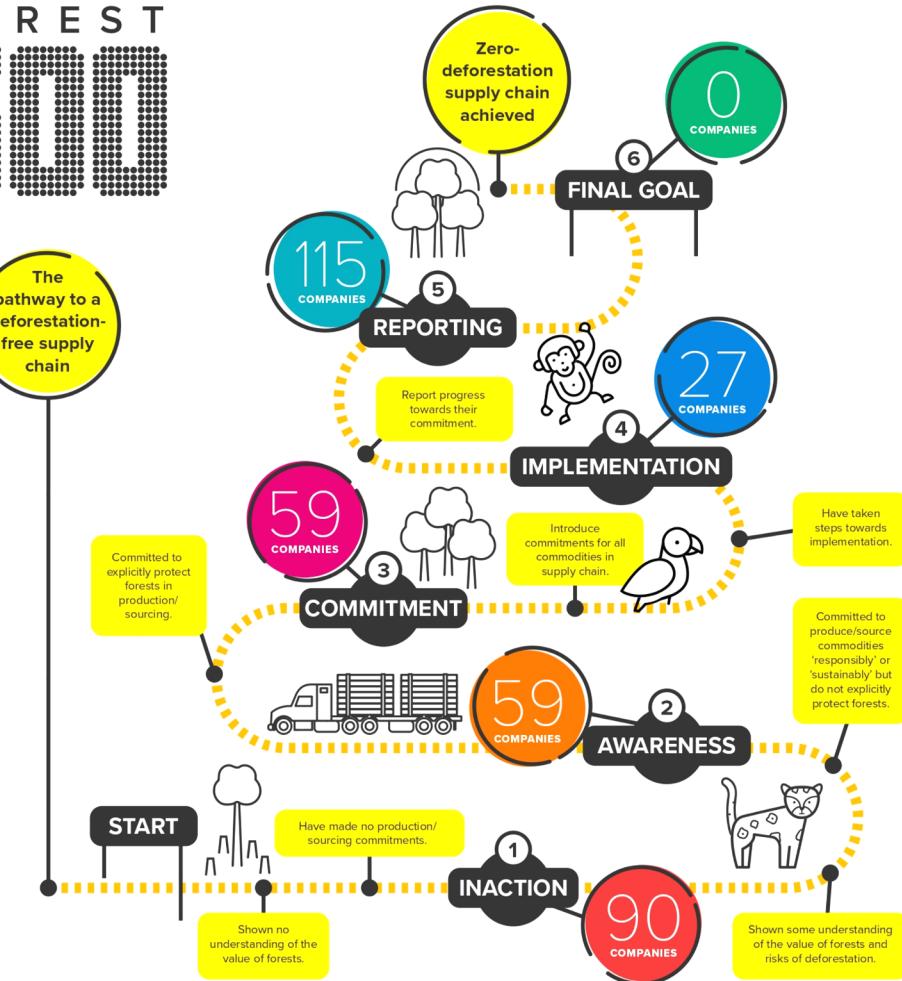
COMMITMENT COUNT BY COMMODITY





FOREST 500

The pathway of company efforts to address deforestation in their supply chains
(Forest 500, 2018)



Source: [Forest500, 2018](#)



Range of deforestation commitments

The following commitments and concepts can be used to prioritise important areas or be used to detail activities which a client should and shouldn't do, within a financial institution's deforestation or land conversion commitment:

- ❖ **Zero deforestation** – no forest areas cleared or converted
 - ❖ **Zero net deforestation** – allows for clearance or conversion of forests in one area as long as an equal area is replanted
 - ❖ **No Deforestation, No-peat and No-Exploitation (NDPE)** – No deforestation, no development on peat and exploitation of workers, local communities or small-scale growers
-
- ❖ **High Conservation Value (HCV)** - No conversion of HCVs
 - ❖ **High Carbon Stock (HCS) areas** - No conversion of HCSs
 - ❖ **Certification** - Supplying or sourcing commodities which are certified
 - ❖ **Legal and illegal production** – Supplying or sourcing commodities which have been legally produced

Section 04

Introduction to Deforestation Risks

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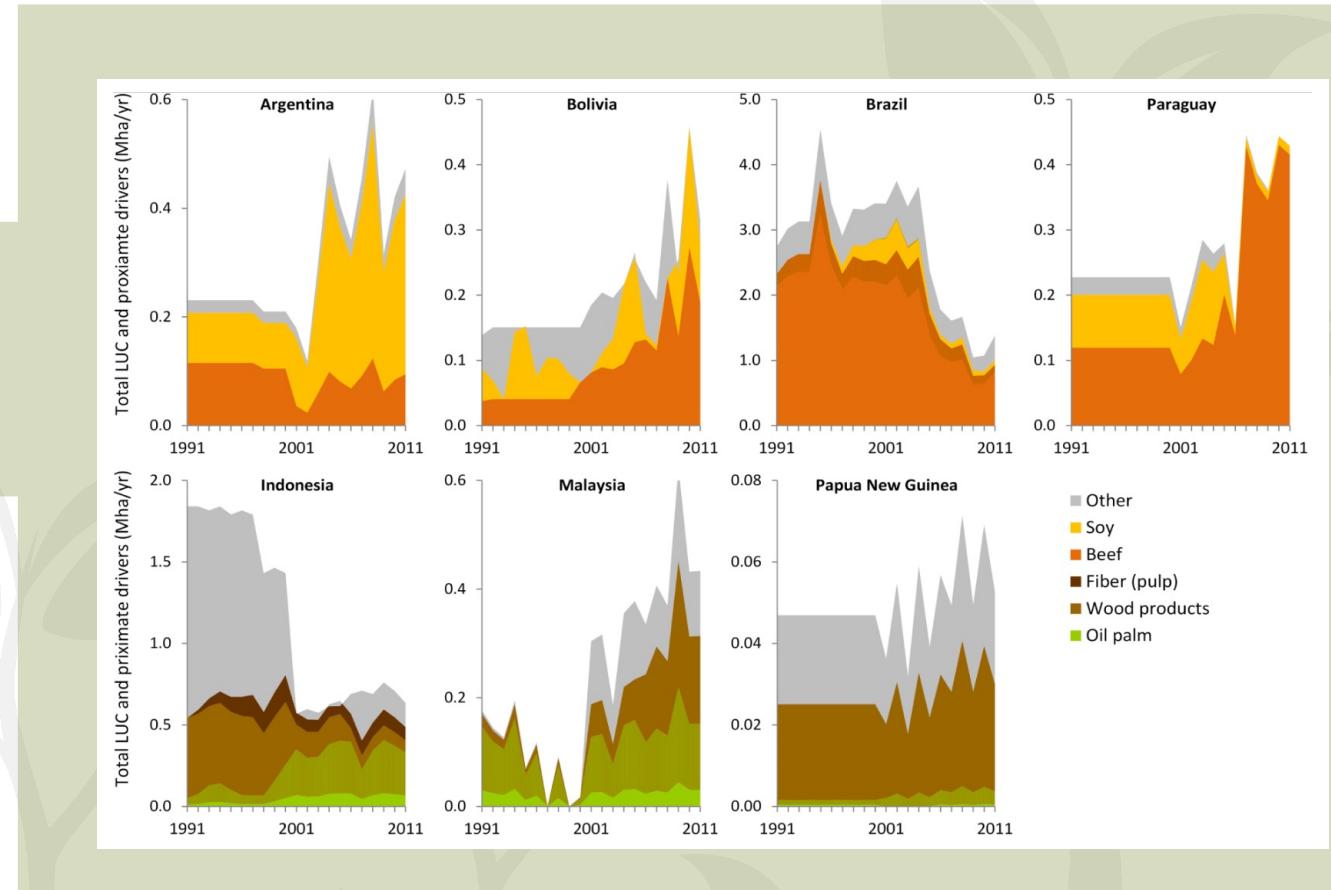
Comparison of Commodity Production Impacts

The impacts of tropical deforestation area and carbon emissions from land use change differ for each commodity type and production location.

Why does this matter to you?

What do you need to know to understand the potential impacts?

- 1) What commodity/ies is your client producing or sourcing?
- 2) Where is your client producing or sourcing from?



Source: Henders, S., Persson, U.M. and Kastner, T., 2015. Trading forests: land-use change and carbon emissions embodied in production and exports of forest-risk commodities. *Environmental Research Letters*, 10(12), p.125012.



Deep Dives of Socio-Environmental Impacts of Commodities

As the processes, size and geographic locations of each commodity production system differs, the resultant impacts on people and local communities will also vary.

Palm Oil

Soy

Beef

Cocoa



Palm Oil

Introduction

- ❖ Malaysia and Indonesia are, by far, the major producing countries with India, China and the European Union being major importers
- ❖ Global palm oil market predicted to reach **92.84 billion** in 2021 ([Zion Market Research, 2016](#)) -> continued pressure on forests and ecosystems
- ❖ Approximately **60%** of global palm oil produced is from **privately or state-owned plantations**, whilst the remaining 40% is produced by **3 million smallholders** ([RSPO, 2020](#))
- ❖ Palm oil produced under voluntary sustainability standards is estimated to be **over USD 7 billion** in 2016 ([IISD, 2019](#)), providing a potential future market opportunity for banks.



Source: [EPOA, 2020](#); [CiFor, 2020](#)



Palm Oil

Changing Landscapes

Why does this matter to you?

Financing clients involved in:

- ❖ deforestation of primary forests
- ❖ degradation of peatland systems
- ❖ negative impacts to globally recognised and popular species
- ❖ Negative impacts to local communities

Can have serious consequences for your banks reputational, market and regulatory risk.

You may find it difficult to profit from the domestic retail market and attract international funding if you are known to be involved with financing deforestation.



Source: [European Space Agency, 2019](#)



Palm Oil: Deforestation-related risks

OPERATIONAL RISK



11 Chinese companies, who purchase Indonesian palm oil, estimated **biophysical risks** such as extreme weather patterns, changes in precipitation and temperature, frequency and occurrence of forest fires to cost **USD 854 million** ([CDP, 2020](#)).

MARKET RISK



The **2016 quarterly revenue at risk** from not complying with their buyer's No Deforestation, No Peatland, No Exploitation (NDPE) policy expectations, was determined for **three palm oil producers**. Results demonstrated that **35%, 42% and 15%** of their quarterly 2016 revenue would be at risk from non-compliance ([CRR, 2016](#)).

Non-compliant NDPE palm oil concessions are at risk of becoming **stranded assets**.

REGULATORY RISK



In 2016, the Government of Indonesia fined Sampoerna Agro \$81 million for 2014 forest fires on 3,000 hectares on its concessions in Riau Province ([Business Insider, 2016](#)). The \$81 million fine is slightly less than Sampoerna Agro's revenue in the first six months of 2016 ([CRR, 2016](#)).

LEGAL RISK



In 2018, Otoritas Jasa Keuangan (OJK), the Indonesian financial regulator issued a regulation for all financial institutions to create sustainable economic growth through regulation No.51/POJK.03/2017 ([IFC, date unknown](#)). This means providing finance towards clients who sustainably use natural resources.

REPUTATIONAL RISK



Mar 18, 2010, 12:00pm EDT

Forbes Greenpeace And Nestle In A Kat Fight



This article is more than 10 years old.

If you searched for #KitKat on Twitter in the past day or two, you would find lots of tweets that read like this:

Give the orangutan a break... Stop Nestlé using palm oil from destroyed rain forests <http://bit.ly/KitKat #kitkat #nestle>

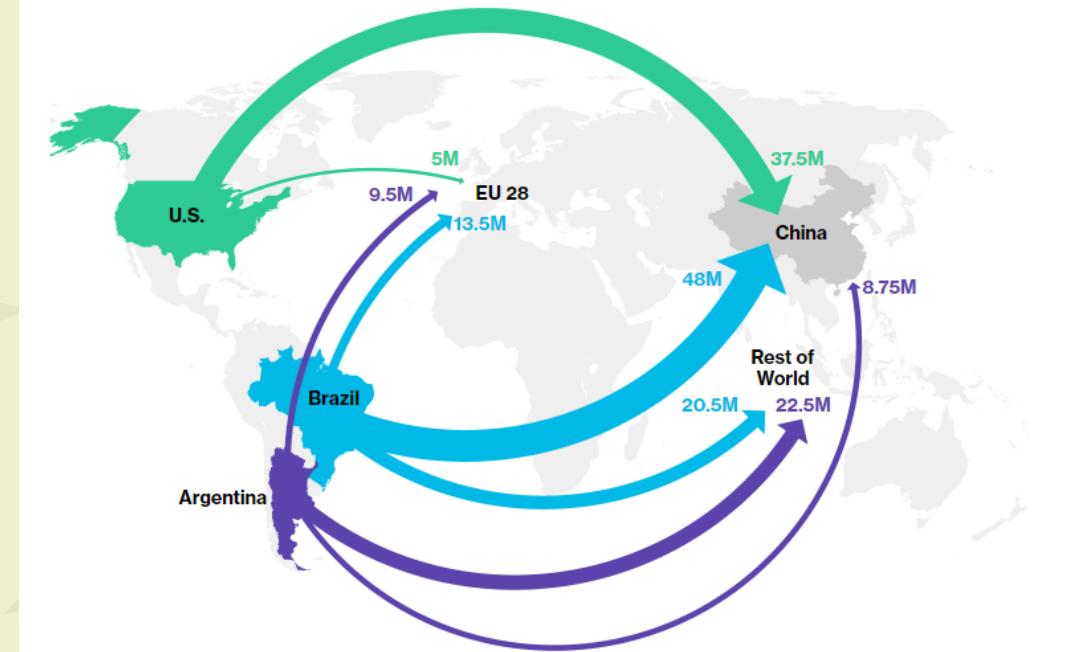


Soy

Introduction

- ❖ Global soybean production in South America has substantially **grown** by 123% between the years of 1996 and 2004 ([WWF, 2019](#)), with **Brazil, Argentina and Paraguay**.
- ❖ **China** is the major importer of soybean, followed by smaller imports from the Netherlands, Indonesia, Mexico and Germany.
- ❖ Estimated only **2-3%** of **global soy production is certified** in 2016 (KPMG, 2016), with organic, ProTerra Foundation and RTRS representing 1.6%-2.4% certified soy ([International Trade Centre, 2020](#)).
- ❖ The Consumer Goods Forum, a network of 400 businesses with combined sales of USD 3,300 billion, has created a **Sustainable Soy Sourcing Guideline** for companies to adhere to.

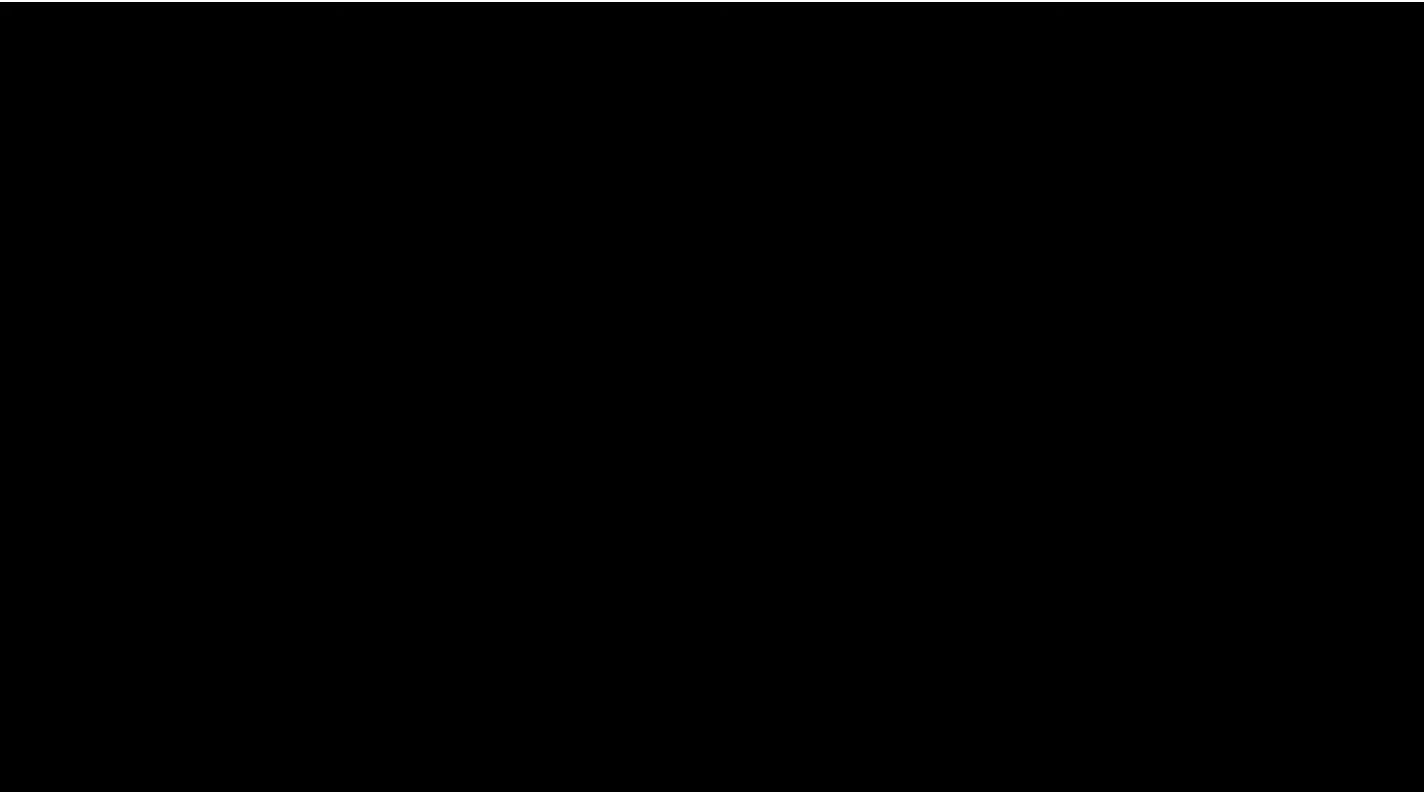
Source: [Bloomberg, 2018](#)





Soy

Introduction



Source: [Bloomberg, 2018](#)



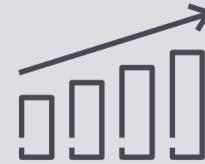


Soy: Deforestation-related risks



OPERATIONAL RISK

Studies have demonstrated that changes in annual precipitation patterns and temperature influences soybean yield (Sharma et al., 2010; Goldblum, 2013).



MARKET RISK

Nestle stopped sourcing all of their Brazilian soy from Cargill, as they were not able to trace it back to site locations, leading to concerns that soybeans were being produced on converted land ([Brasil Economico, 2019](#)).



REGULATORY RISK

Banks are potentially exposed to fines in some jurisdictions if financing soy farmers that are in breach of forest protection laws.



LEGAL RISK

Banco Central do Brasil has introduced regulations which prohibit lending to farms which violate sustainability focussed rules and regulations within the Amazon, activities taking pace on embargoed areas and forced labour.



REPUTATIONAL RISK

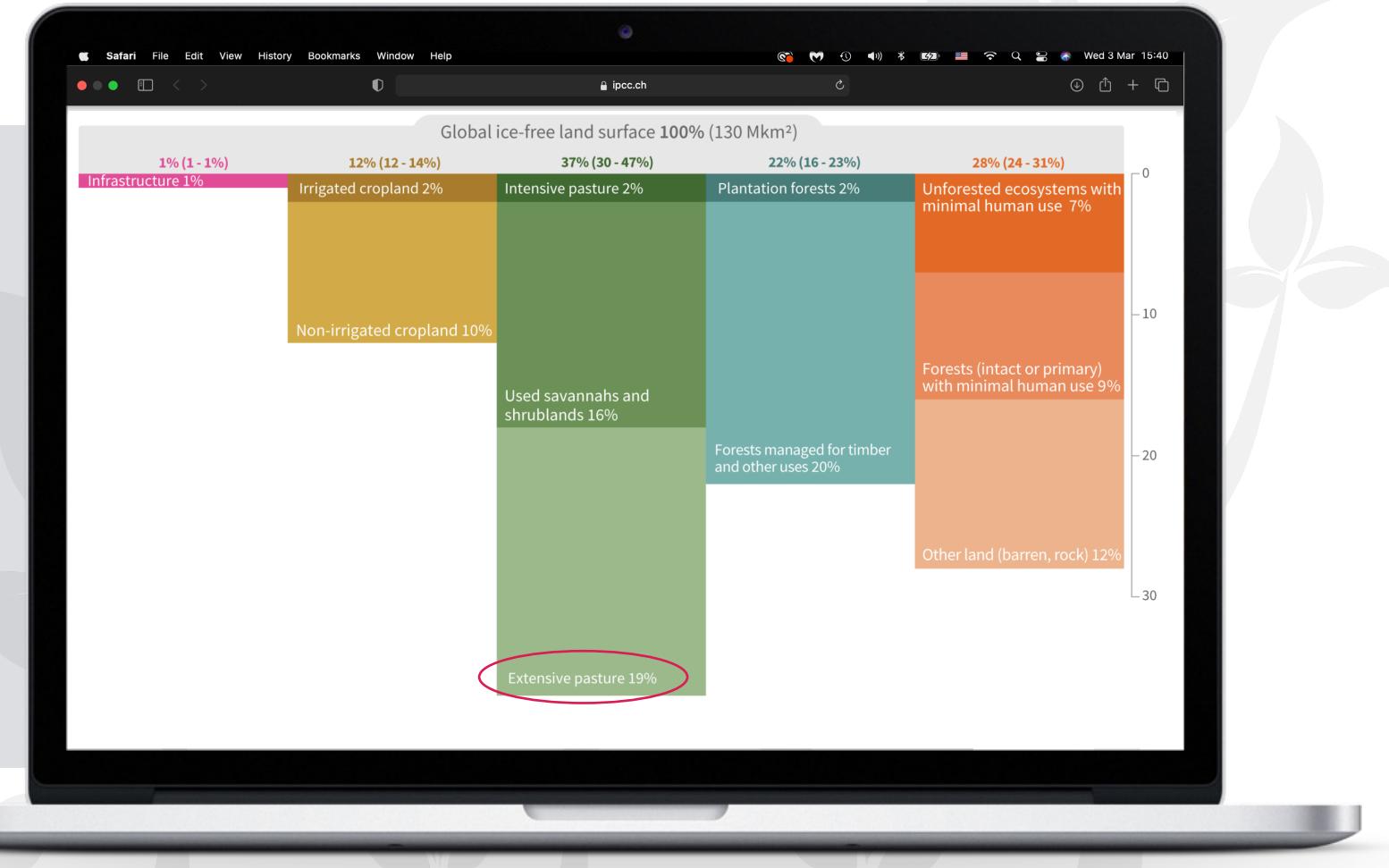
An example is the [actions by the NGO Mighty Earth](#) against Cargill based on deforestation-related accusations.



Beef and leather

Introduction

- ❖ **Pastures occupy 21% of the global land surface** (twice the area of cropland)
- ❖ **Cattle ranching is the greatest driver of deforestation globally** ([Henderson et al., 2015](#)), but risks depend on where it happens
- ❖ Deforestation **risks are largely concentrated in South America** with 71% of total deforestation attributed to beef production
- ❖ Projected **growth in beef production** (+5Mt) in the next 10 years will mostly occur in developing countries (81%, e.g. Brazil and Argentina) ([FAO](#), 2020) → continued pressure on forests and other ecosystems
- ❖ **Hidden supply chain risks:** supply chain complexity, lack of traceability and lack of certification



Source: [IPCC, 2019](#)



Beef and leather

Socio-Environmental Impacts





Beef and leather: Deforestation-related risks



OPERATIONAL RISK

Deforestation is a primary cause of soil degradation. Degraded pastures are a major problem in the Amazon region, leading to low cattle productivity and conversion of new forest areas for cattle ranching.



MARKET RISK

In 2009, a large investigation by the Brazilian Federal Prosecutors Office established links between slaughterhouses in the Amazon and deforestation in farms supplying them. To avoid prosecution and not to lose markets, the major beef processor signed legally binding commitments to avoid illegal deforestation in their supply chains.



REGULATORY RISK

In 2020, following international concerns related to deforestation and fires in the Amazon region, three main private banks in Brazil, Bradesco, Itau-Unibanco and Santander, have announced joint plans to avoid credit to cattle production linked to deforestation.



LEGAL RISK

In 2008, regulation by the Brazilian Central Bank has established stricter environmental requirements for banks to follow when providing credit to farmers, requiring them to proof compliance with forest regulations. This has substantially reduced credit to cattle farmers in the Amazon region, also leading to reduced deforestation rates.



REPUTATIONAL RISK

Latest Investigations Projects About

Barclays, HSBC among banks financing “most harmful agribusinesses” with \$44bn

16.10.2019

A new Global Witness report reveals how more than 300 financial institutions funnelled money into global beef, leather, palm oil and rubber firms linked to deforestation

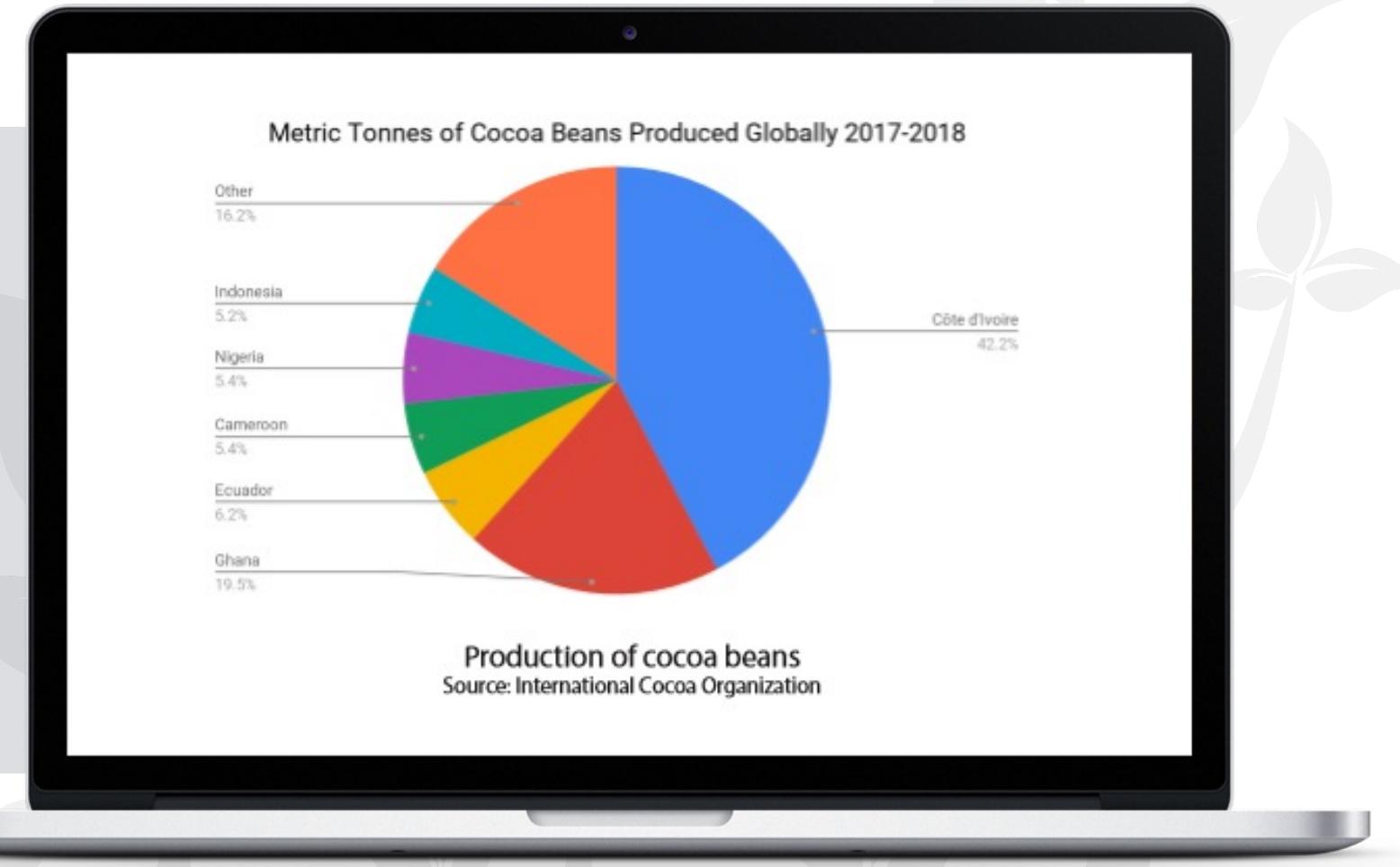


Cocoa

Introduction

- ❖ The three current largest producing countries of cocoa is Cote d'Ivoire, Ghana and Ecuador ([International Cocoa Organization, 2020](#), where 60% is sourced from Cote d'Ivoire and Ghana ([FairTrade, 2020](#))
- ❖ Smallholders make up 90% of all cocoa farmers ([Ceres, 2020](#))
- ❖ The Netherlands, Germany and the United States are the three top importing countries, importing 23.3%, 10.9% and 10.1% respectively ([OEC, 2018](#))
- ❖ The certified area for cocoa was at least 3.2 million ha in 2020 and reached a global share of the total cocoa area of at least 27% ([International Trade Centre, 2020](#))

Source: [Ceres, 2020](#)





Cocoa

Socio-Environmental Impacts

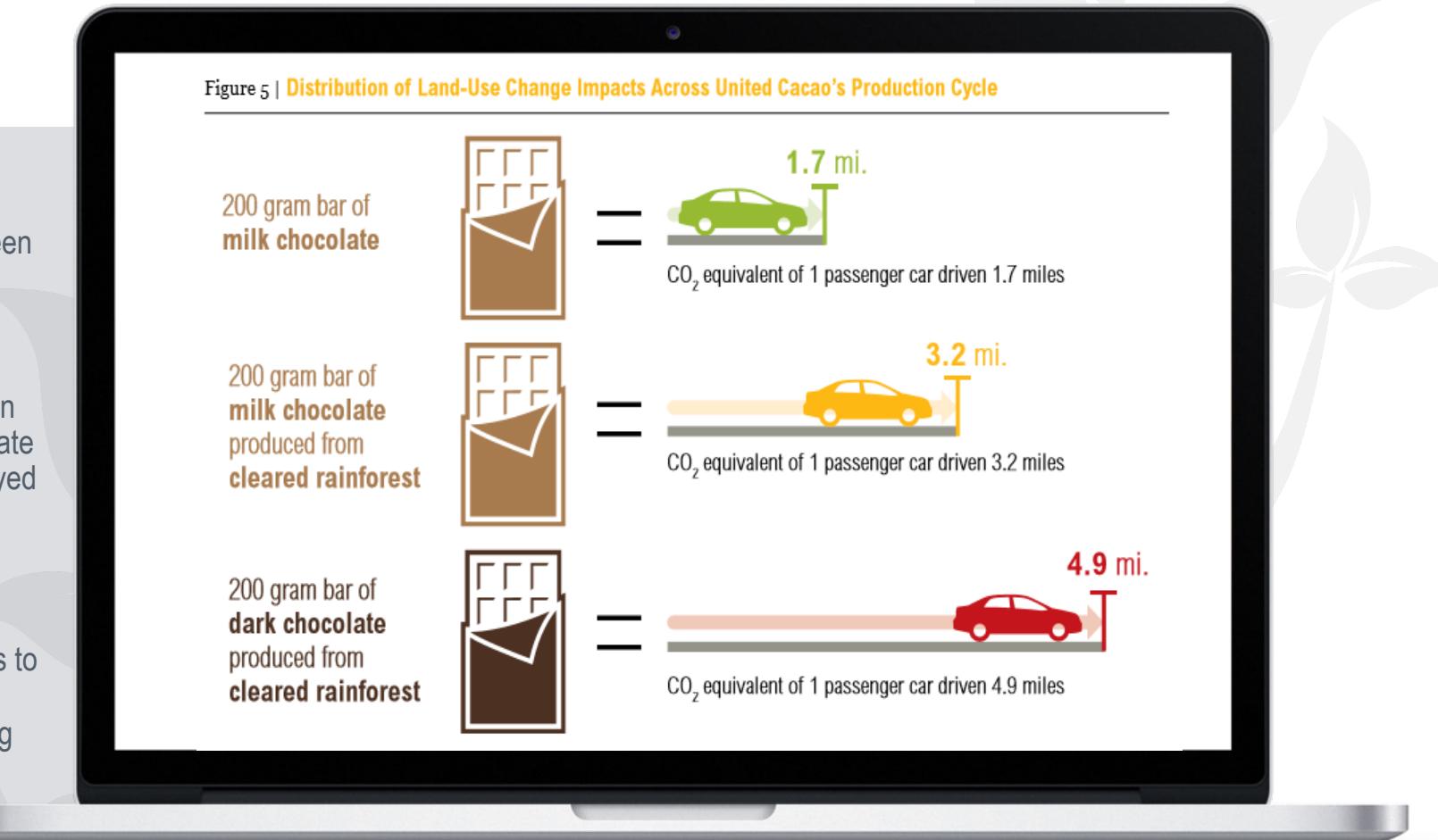
Environmental

- ❖ Clearance of 117,240 ha of virgin forest in Ghana between the years of 2010 to 2015 and 3,000km of new feeder roads have been constructed since 1999 to link cocoa farms to marketing outlets ([Takyi et al., 2019](#))
- ❖ In 2015, less than half of the protected areas surveyed in Côte d'Ivoire still contained any of the country's 22 primate species, and seven out of the 23 protected areas surveyed had been converted almost entirely into illegal cocoa production ([Bitty et al., 2015](#))

Social

- ❖ Conversion of natural forest into cocoa plantations leads to loss of ecosystem services and biodiversity species richness ([Beenhouwer et al., 2013](#)), potentially impacting locals who rely on provisioning services of forests.

Source: [WRI, 2015](#)





Cocoa: Deforestation-related risks

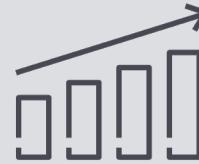
OPERATIONAL RISK



Climate change impacts pose a threat to areas currently suitable for cocoa production ([Laderach et al., 2013](#)), leading to reduce cocoa productivity, these climate-related risks can turn into **operational risks** for upstream supply-chain

Climate-change related impacts can lead to **market risk** due to cocoa volume and price fluctuations

MARKET RISK



Enforcement of stricter procurements standards of downstream buyers as part of their no-deforestation commitments can lead to **market risk** for suppliers producing and/or traders sourcing deforestation-linked cocoa ([Ceres, 2020](#))

Sustainable cocoa drives market growth of cocoa grown under voluntary sustainability standards ([IISD, 2019](#))

REGULATORY RISK



As regulators in Europe consider stricter human rights and environmental due diligence and disclosure requirements ([RI, 2020](#)), those involved in producing or sourcing cocoa produced by **child labour** and or **deforestation-linked cocoa will be penalized**. Investors have shown their support for human rights report to grow ([RI, 2020](#))

LEGAL RISK



UK law and EU consultations towards the production of deforestation-linked products, including cocoa, will result in producing and importing countries to be **penalised with fines if they non-compliant**.

REPUTATIONAL RISK



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15 Dec 2017 Story [Cocoa industry linked to illegal deforestation in Côte d'Ivoire & Ghana](#)

In 2017, an investigation by the environmental campaigning group, Mighty Earth led to the release of "Chocolate's Dark Secret", a report which alleged that a large amount of the cocoa used in chocolate produced by Mars, Nestle, Hershey's, Godiva, and other major chocolate companies was grown illegally in West Africa. The two countries are the world's two largest cocoa producers. The report documents how in several national parks and other protected areas, 90% or more of the land mass has been converted to cocoa.

Company comments in response to the report findings are included below.

Following the report at the UN's 2017 conference on climate change in Bonn, the cocoa and chocolate companies responsible for the purchase of 80% of west Africa's cocoa promised to end forest destruction.

Despite the chocolate industry's pledge to cease sourcing cocoa linked to deforestation, a 2018 Mighty Earth report has found that deforestation in West Africa for cocoa has continued, and in some cases has increased. The report, [Behind the Wrapper: Greenwashing in the Chocolate Industry](#), identifies deforestation hotspots, including in protected areas and national parks, putting some of the last refuges for forest elephants and chimpanzees at risk and threatening the stability of the regional climate.



Break Out Groups Exercise

In breakout groups:

What are the most obvious and less obvious risks?

How would the materiality of those risks be perceived by different parts of the bank?

What do you expect to be your biggest risks in the next ten years?

If possible, provide some examples to aid the discussion

You will have 15 minutes to discuss, please assign a spokesperson to your group.



Break Out Groups Exercise

Financial institutions risks

Non-performing loans

Clients may be unable to service debt

Asset values

Assets may become stranded if market conditions change

Revenue/profitability

Market value may deteriorate as revenue and profits are impacted

Soft commodity supply chain risks

Operational

Resource scarcity, biodiversity loss and ecosystem degradation leading to decreased productivity and resilience

Legal and Regulatory

Environmental breaches and un-preparedness for compliance

Legal and Regulatory

Legal liabilities due to failure to manage environmental and social risks in activities

Markets

Change in consumption due to changes in societal preferences

Reputational

Companies might be targeted by campaigns due to their involvement in soft commodity value chains

Soft commodity supply chain

PRODUCERS

TRADERS

PROCESSORS

RETAILERS

CONSUMERS



Risks within soft commodity supply chains can affect standard financial metrics (e.g., revenue, asset valuation, or costs) which can affect credit worthiness of clients, or market value of debt, or equities of investee companies.

The soft commodity supply chain includes a diverse range of entities that have either direct or indirect impacts on forests.



Q&A



Summary and key messages

- ❖ Natural capital helps financial institution and businesses think about impacts and dependencies on nature. Nature loss equals economic loss and is thus a financial risk.
- ❖ Global demand for commodities is the primary driver for deforestation. In response, regulatory, market, and societal trends are moving towards deforestation-free finance.
- ❖ The high dependency and impact of agricultural-based industries on forests and their services, may translate as operational risk, market, reputational, and legal risk for the company that you finance.
- ❖ Banks have considerable indirect environmental impact linked to the clients they finance. This might lead to financial risks such as non-performing loans, asset values, and revenue profitability.
- ❖ Deforestation risk mainly lie in the production stage of the supply chain, but can translate as risks along the supply chain.





Next module: Risk Identification and Assessment

Despite this progress, the pathway towards deforestation-free finance for the banking sector requires several steps, which includes conducting a **risk assessment** [to ensure effective implementation of no deforestation policies, as well as ensuring progress to be transparently reported].

The next Module (*Deforestation Risk Identification and Assessment*) will provide details on how banks can **identify, screen and assess deforestation risk**

The next module will cover:

- ❖ How deforestation-related risks fits within the traditional risk management framework
- ❖ Deforestation-related assessment tools, where the fit within risk management process, and how to use them.



Thank you

Next Session: Module 2, Part A

Thursday, 29th September, 14:00-16:00 BST