

# Putting nature and people at the centre of food system transformation

## Training

The Economics of Ecosystems and Biodiversity  
for Agriculture and Food  
(TEEBAgriFood):  
Operational Guidelines for business



**CAPITALS  
COALITION**

# Module 1

The TEEBAgriFood for business project and the Operational Guidelines for Business Stage 1 Frame: why is a capitals assessment relevant to my business ?

## Structure

1. Training goals & Module 1 learning objectives
2. Intro to Capitals Coalition & setting the scene
3. The capitals approach as the solution for preserving and creating value
4. Intro to the TEEBAgriFood for Business project & Guidelines
5. Your business case & real business applications
6. WHY - Frame stage: Get started
7. Summary of lessons learned





# Module 1

## Chapter 1.1

Training goals &  
Module 1 learning objective



CAPITALS  
COALITION



# Overall course learning objective

By the end of the course, you will:

- Understand how the capitals approach provides direction for better **business decision-making**.
- Be familiarized with how to assess **business risks and opportunities** based on natural, social, human capital.
- Have a basic understanding on how to assess, **measure and value your impacts and dependencies** on nature and people across operations and **value-chains**.
- Be familiarized with the process of a **capitals assessment** and be equipped with the tools to start an assessment in your company.
- Be inspired to **drive change** within your organization, by sharing data, setting targets and **transforming business actions**.



# Your learning journey

Each training module consists of several building blocks to facilitate your learning experience:

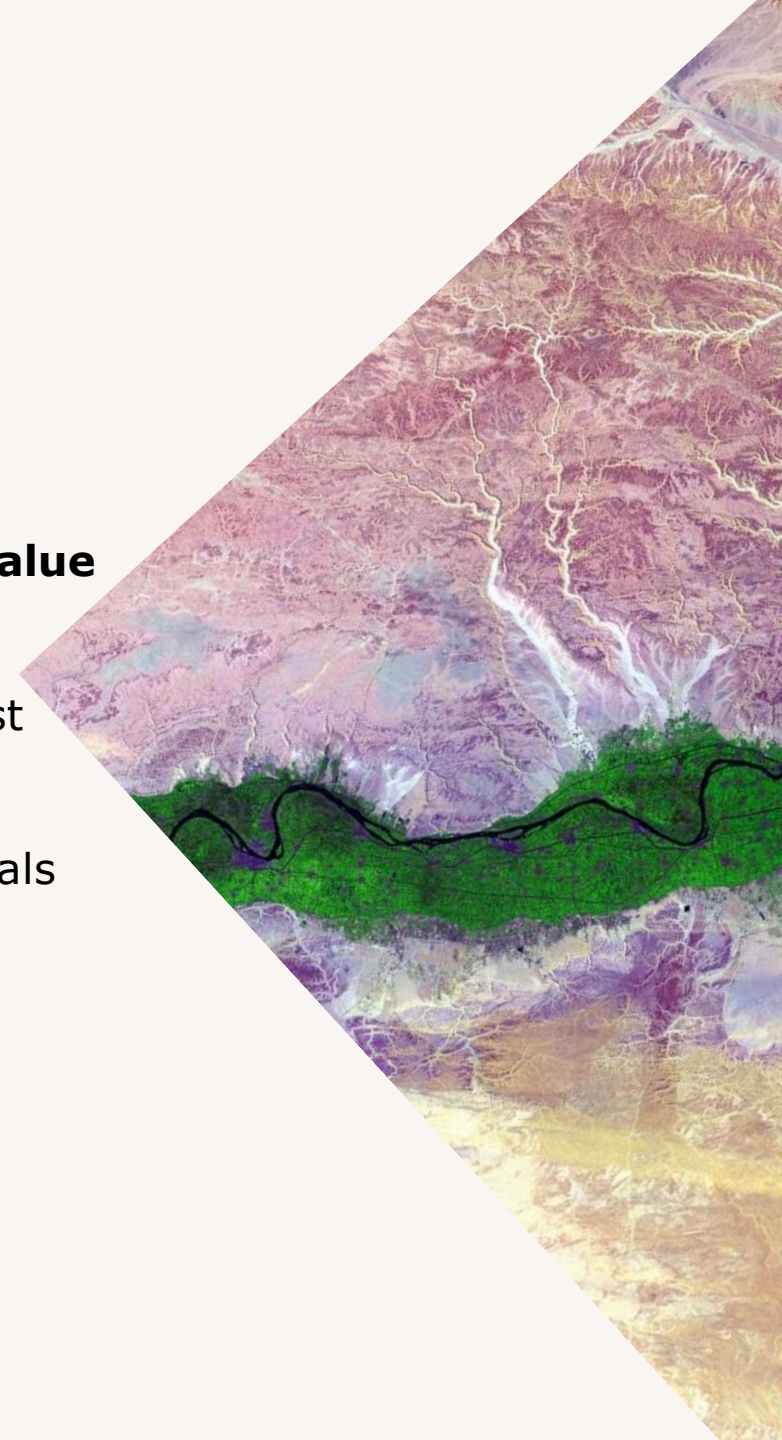
- ✓ Written guidance for trainers & trainees per module
- ✓ 4 modules that provide
  - ✓ Inspiration about food system change
  - ✓ Real business cases and videos
  - ✓ Theory regarding the capitals approach
  - ✓ Exercises to apply the theory to own business case
  - ✓ Summary of lessons learned



# Learning objective module 1

By the end of this module, you will:

1. Understand the learning objectives of the training
2. Have learned about the **challenges and the solution to preserve value** for nature, people and business
3. Be introduced to the TEEBAgriFood Guidelines for business and the first stage: **Frame (WHY?)**
4. Be familiarized and have practiced with the **key concepts** of the capitals approach:
  - natural, social, human and produced capital
  - stocks and flows
  - impacts and dependencies
  - risks and opportunities
5. Be inspired by potential **business applications** and how a capitals assessment can be used in your own business context







# Module 1

## Chapter 1.2

**Introduction to  
Capitals Coalition  
& setting the scene**



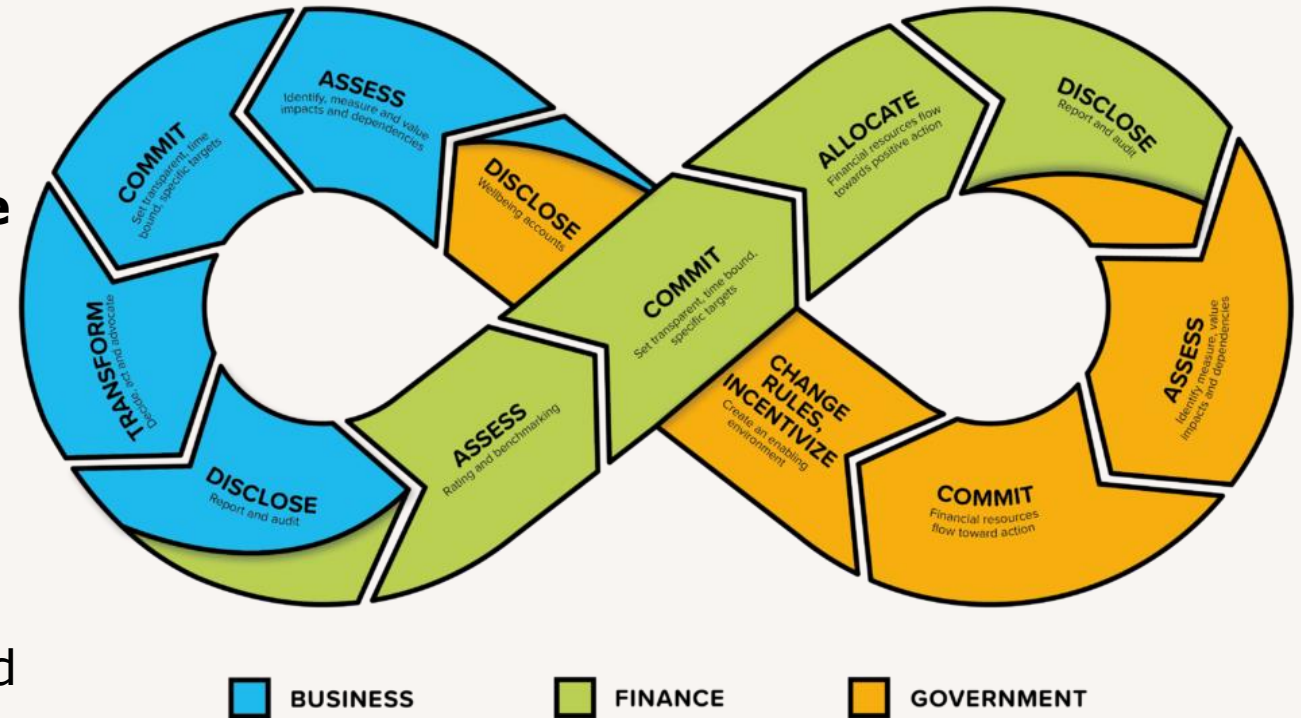
**CAPITALS  
COALITION**

# Capitals Coalition

We are a **global collaboration transforming the way decisions are made** by including the value provided by nature, people and society.

We work through collaboration with **c.400 organizations from across the entire system**

We use the **infinity loop** to understand the system we influence for transformative change



**c. 400**



Organizations  
at the core

**20,000+**



Global  
community

**13**



Capitals  
hubs

**2**



International  
protocols



# Our History



TEEB for Business Coalition

2012

2014

2016

2018

2019

2020

now

Natural  
Capital  
Coalition



Natural Capital  
Protocol



Social and Human  
Capital Coalition

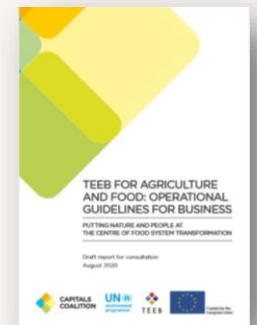


Social and Human  
Capital Protocol



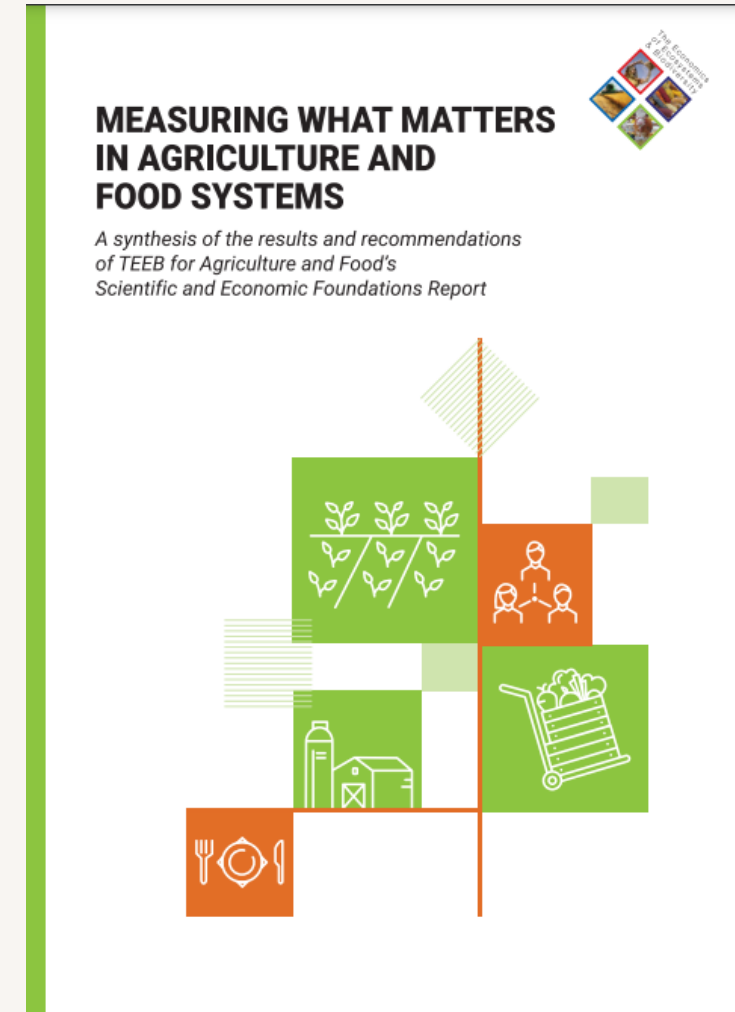
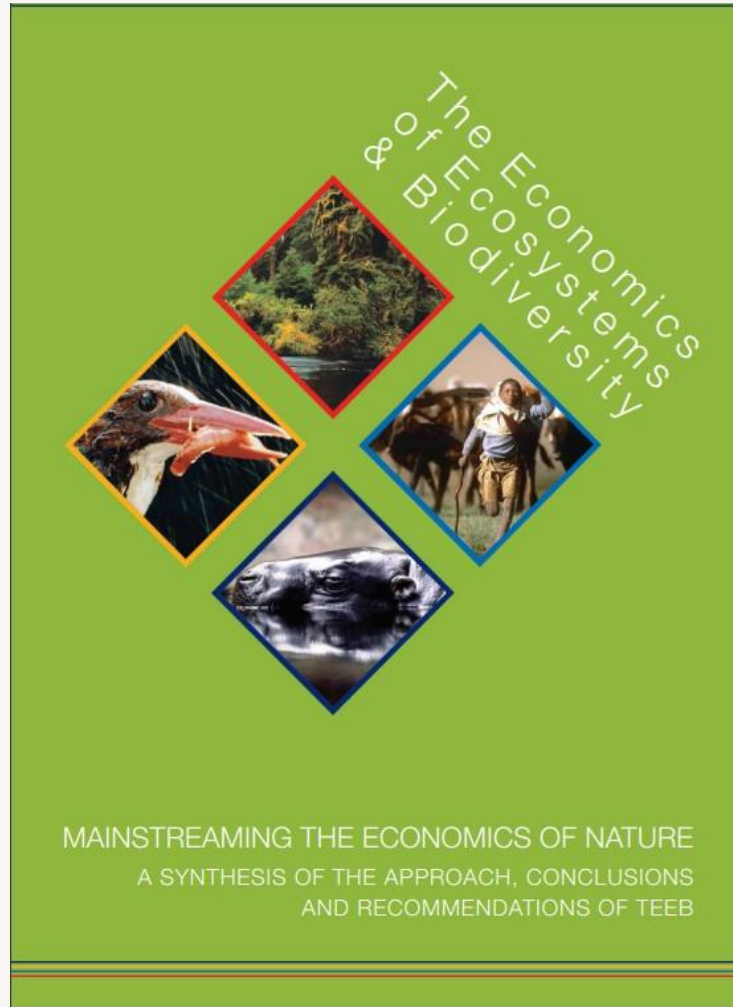
Capitals  
Coalition

**TEEBAgriFood  
Guidelines for  
Business**



# Our History

The Economics of Ecosystems & Biodiversity forms the foundation of Capitals Coalition



# The Challenge

**We are failing to address the global challenges of nature loss, climate change and rising inequality** because our economic systems fail to recognize their dependence on nature, people and society.

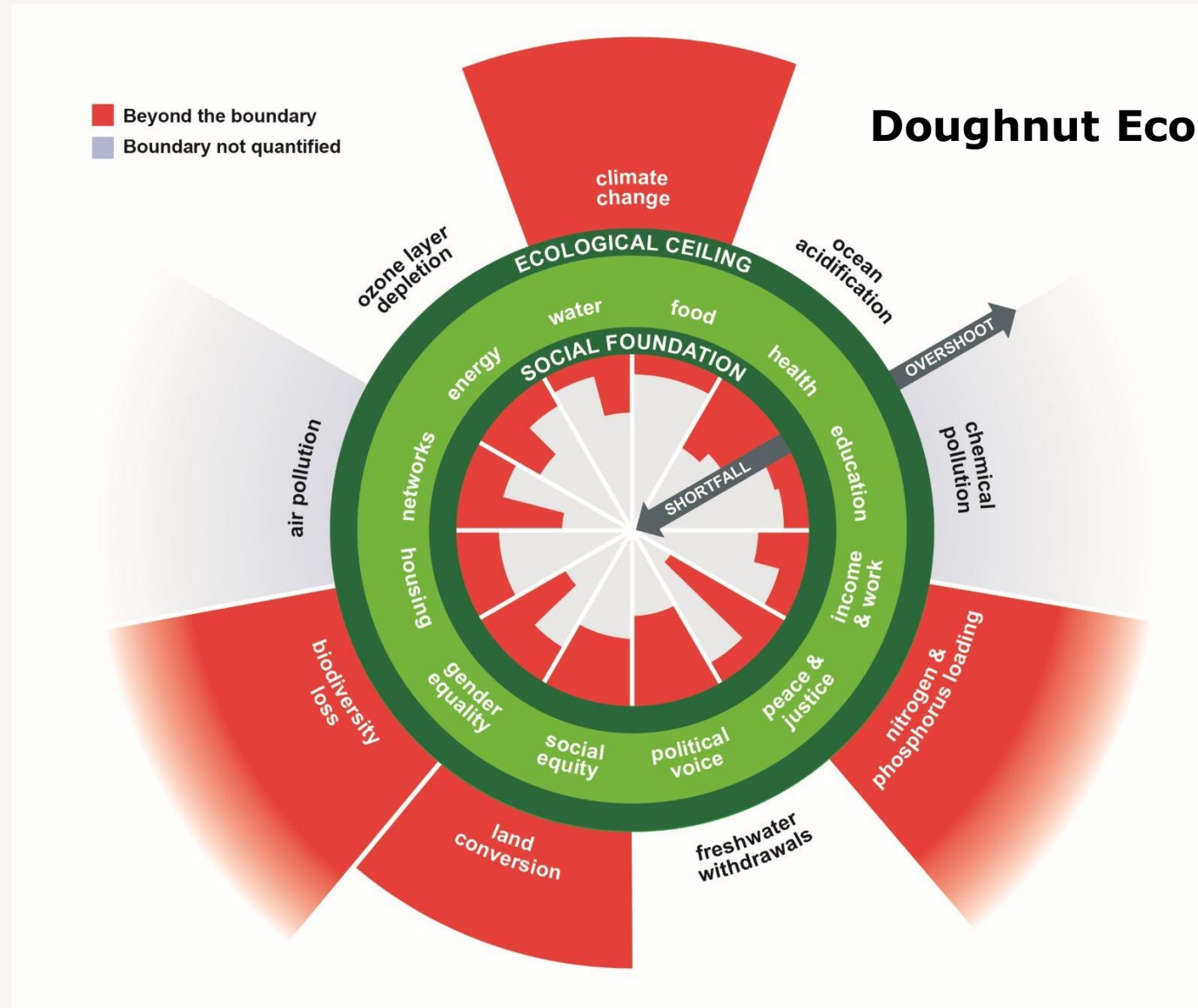
**Conventional measures of economic success do not give all information needed to thrive in today's complex world.**

Too often we deplete one form of capital and treat the financial gains as profits, creating a net loss of value for society and nature.

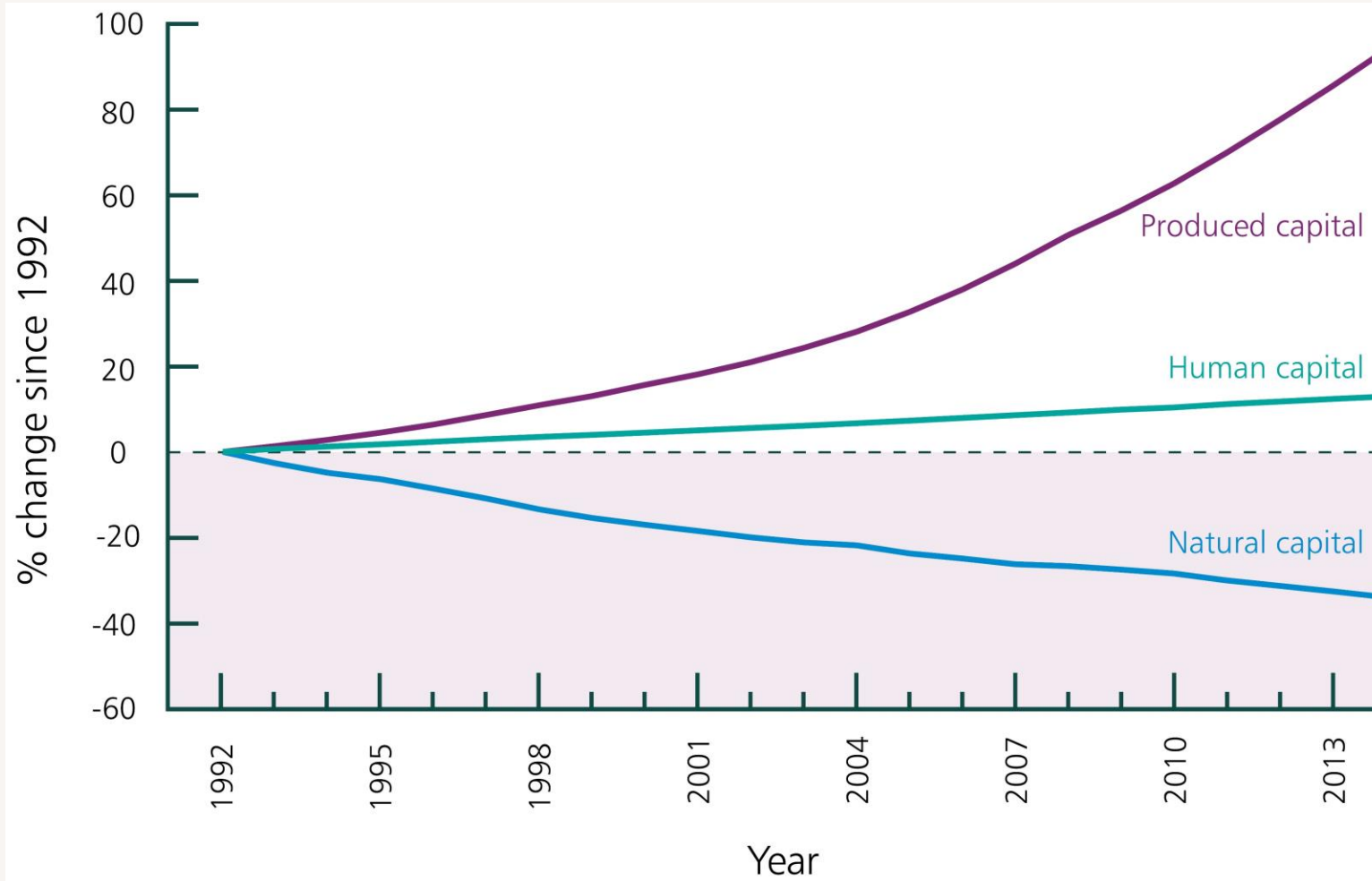




# The challenge: planetary & social boundaries



# The Challenge: Erosion of capitals



**“There is no business on a dead planet”**

# The Solution

Our ambition is that by 2030 the majority of businesses, financial institutions and governments will include the **value of all capitals in their decision-making** and that this will deliver a **fairer, just and more sustainable world.**







# Module 1

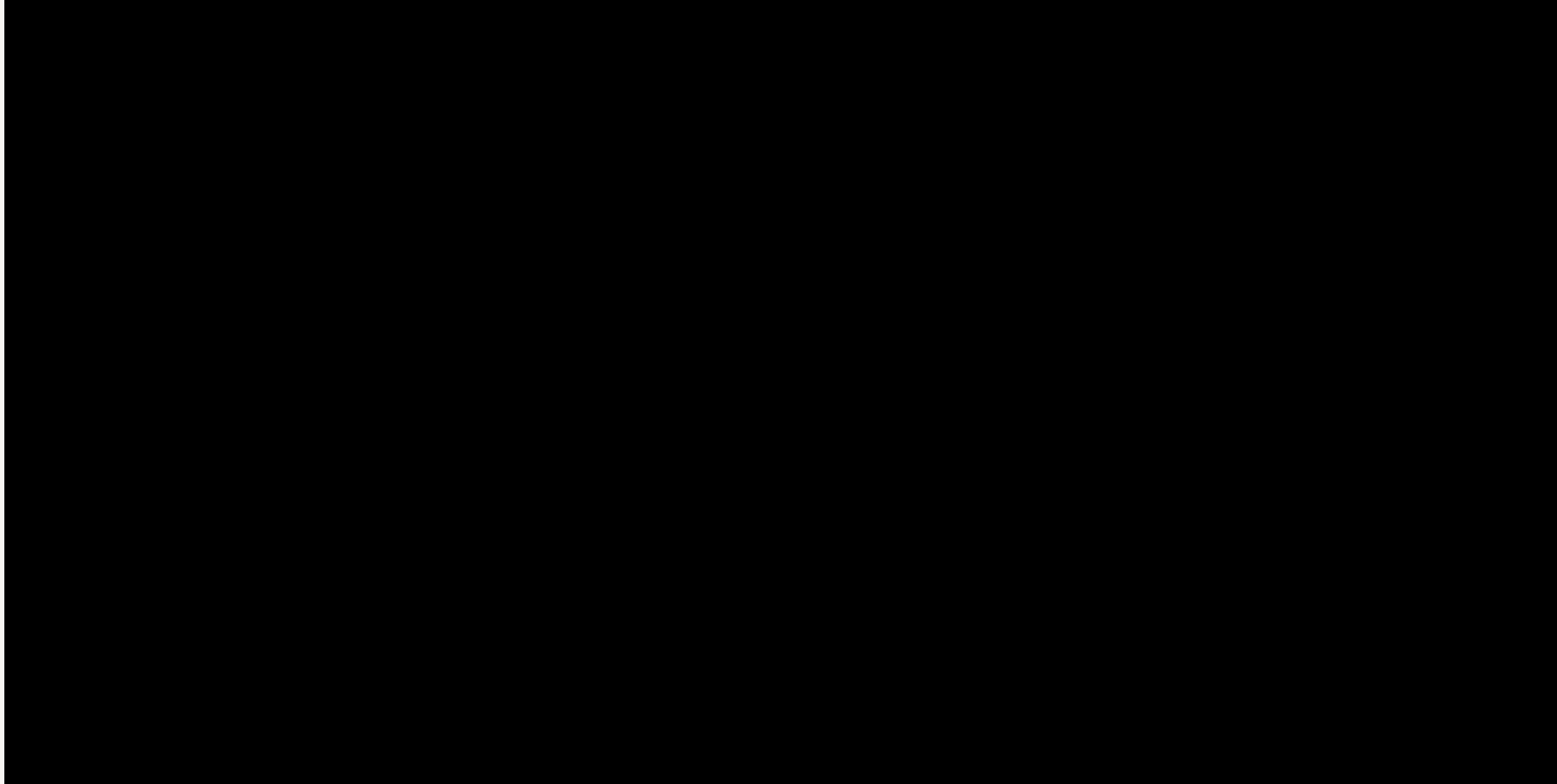
## Chapter 1.3

**The capitals approach as  
a solution for preserving  
and creating value**



**CAPITALS  
COALITION**

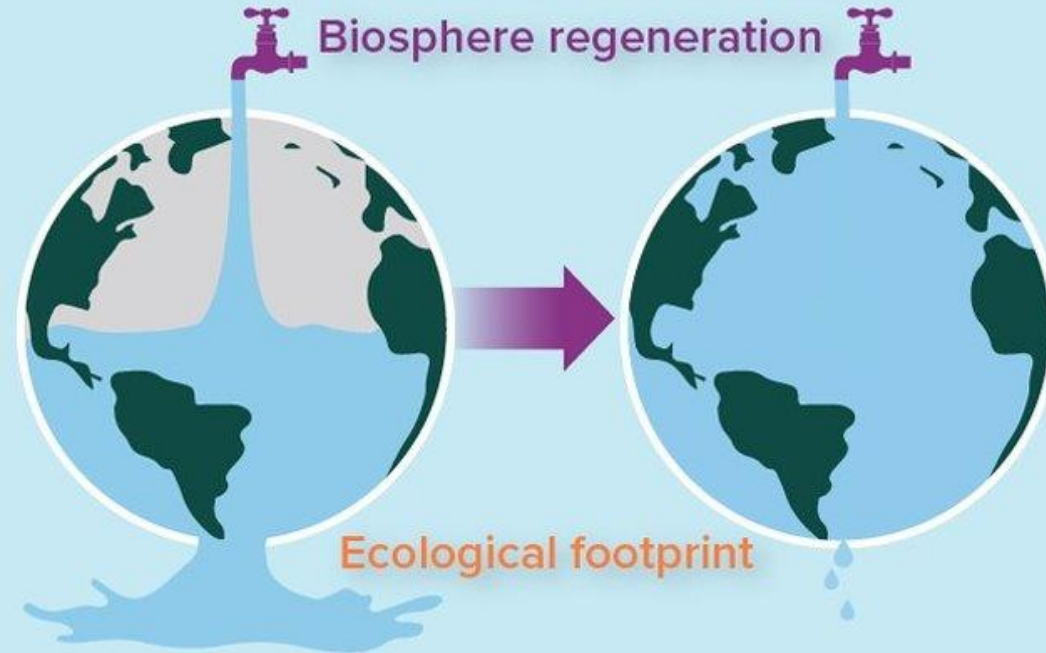
# The Capitals Approach



Source: <https://vimeo.com/747576760>

# The Solution: Preserve and create value

**Sustainability means supporting Nature's regeneration and reducing our demands on it.**



Source: The Economics of Biodiversity: The Dasgupta Review (Dasgupta, 2021)



# The Capitals

**Capital has traditionally been thought of only as money, but capital describes any resource or asset that stores or provides value to people.**

**If we invest in the capitals, they create value. If we degrade them, we erode their value.**



## Natural capital

The stock of renewable and non-renewable natural resources that combine to yield a flow of benefits to people.



## Social capital

The networks together with shared norms, values and understanding that facilitate cooperation within and among groups.



## Human capital

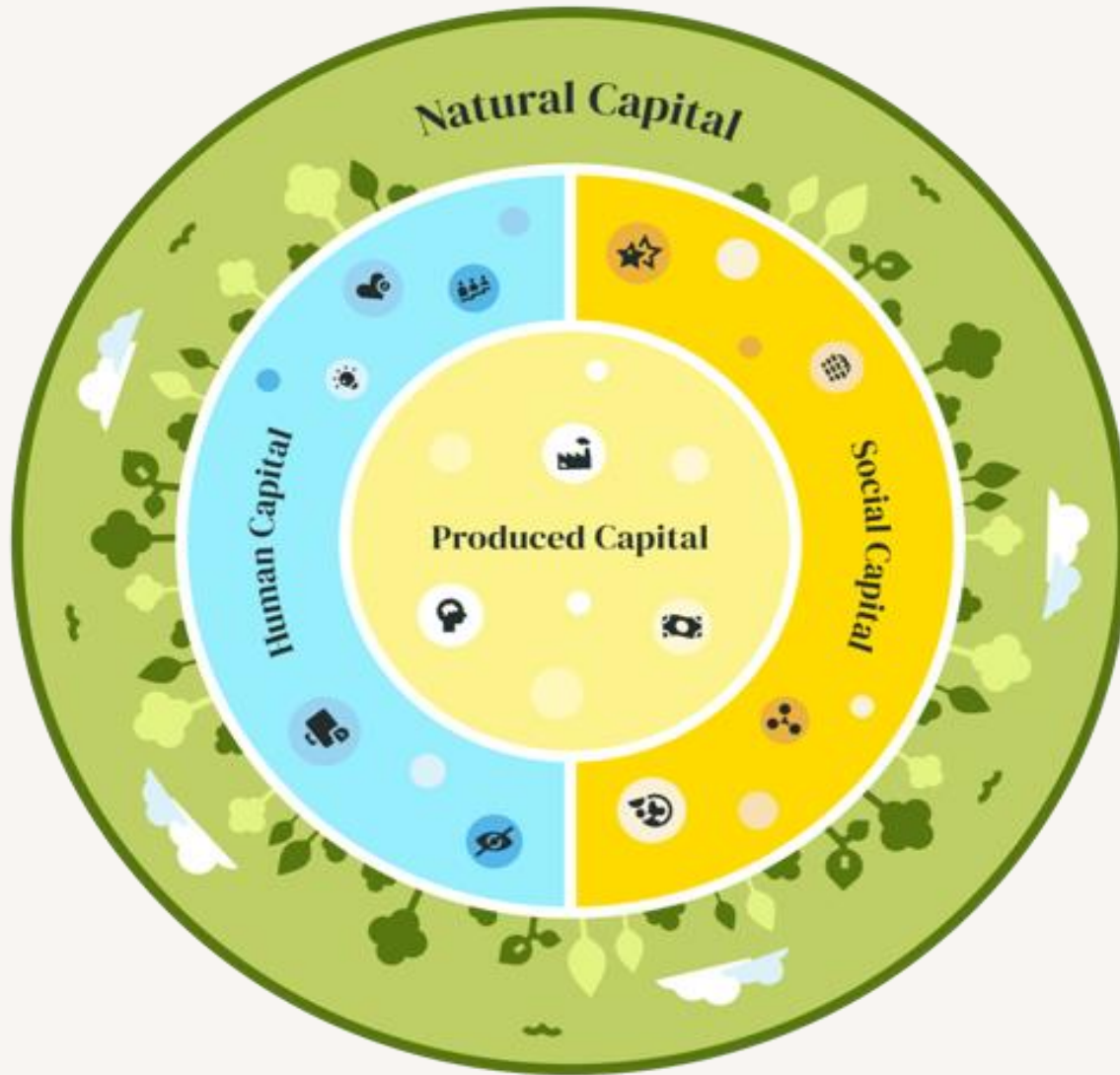
The knowledge, skills, competencies and attributes embodied in individuals that contribute to improved performance and wellbeing.



## Produced capital

The human-made goods and financial assets that are used to produce goods and services consumed by society.

# The Capitals



The capitals are interconnected, with natural capital underpinning the other capitals. As without natural capital, the other capitals won't exist.

# The Capitals Approach

**The success of organizations around the world is dependent upon the capitals.**

---

Flourishing communities, strong and resilient social institutions, thriving natural ecosystems and a stable climate underpin economic and societal prosperity.

---

Understanding their impacts and dependencies on the capitals provides a clear business case for their protection, leading to cascading benefits throughout the system.

---

A capitals approach empowers organizations to make decisions that offer the greatest value to all.





# The Three Shifts

## Impact & Dependency

A capitals approach moves beyond understanding only impacts to also highlighting dependencies.



## Measure & Value

Capitals thinking moves beyond measurement to include valuation. Understanding the value provided by the capitals enables us to include their value in decision-making.



## Silos to Systems

A systems approach sits at the core of the capitals approach. To reduce negative impacts & secure value, organizations must understand the integrated outcomes of their decision-making.





Where value lies –  
**making the  
invisible, visible,** in  
decisions



# Module 1

## Chapter 1.4

**Into to the TEEBAgriFood  
for business project  
& Guidelines**



**CAPITALS  
COALITION**



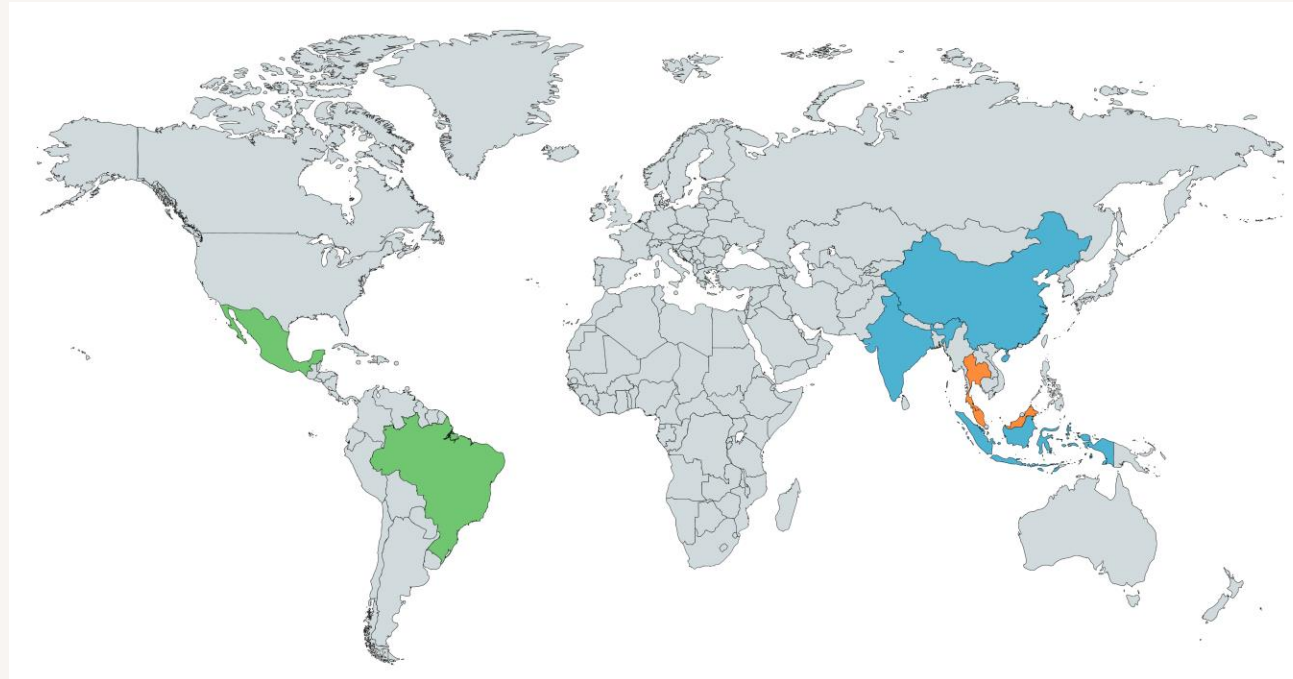
# Project scope



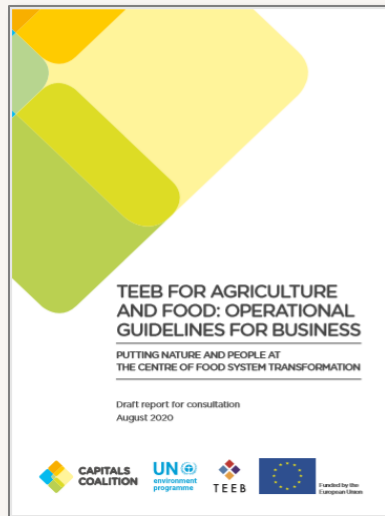
Promoting a sustainable agriculture and food sector

By engaging with food businesses and governments in 7 countries:

- Brazil
- China
- India
- Indonesia
- Malaysia
- Mexico
- Thailand



# Activities



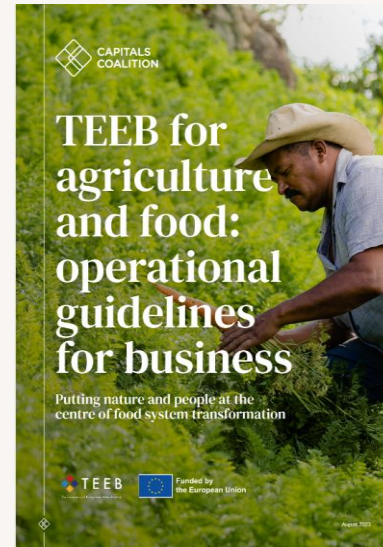
Draft Guidelines

**August 2020**



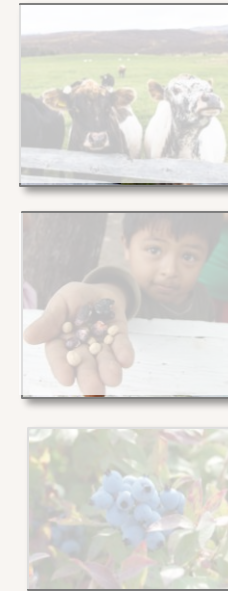
Roundtable consultation  
& training sessions

**2020 - 2021**



Final Guidelines

**September 2023**



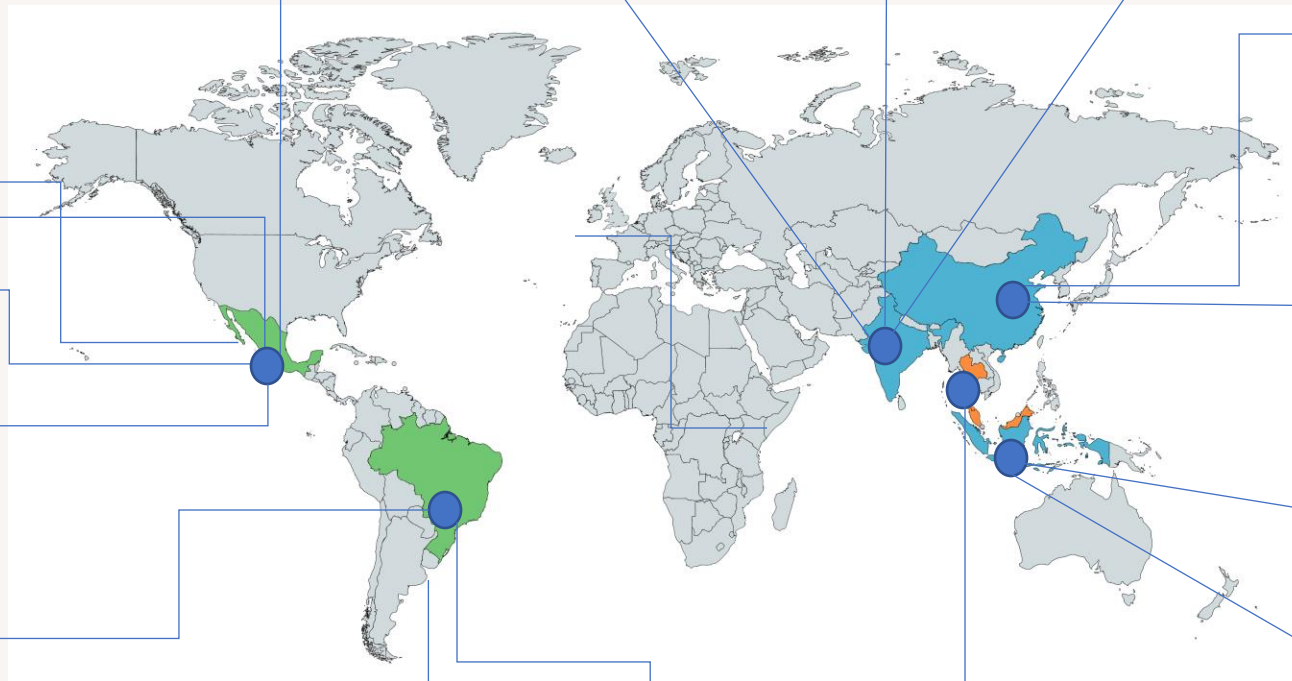
Pilot  
applications

**2020- 2023**

Scale up  
capacity-  
building

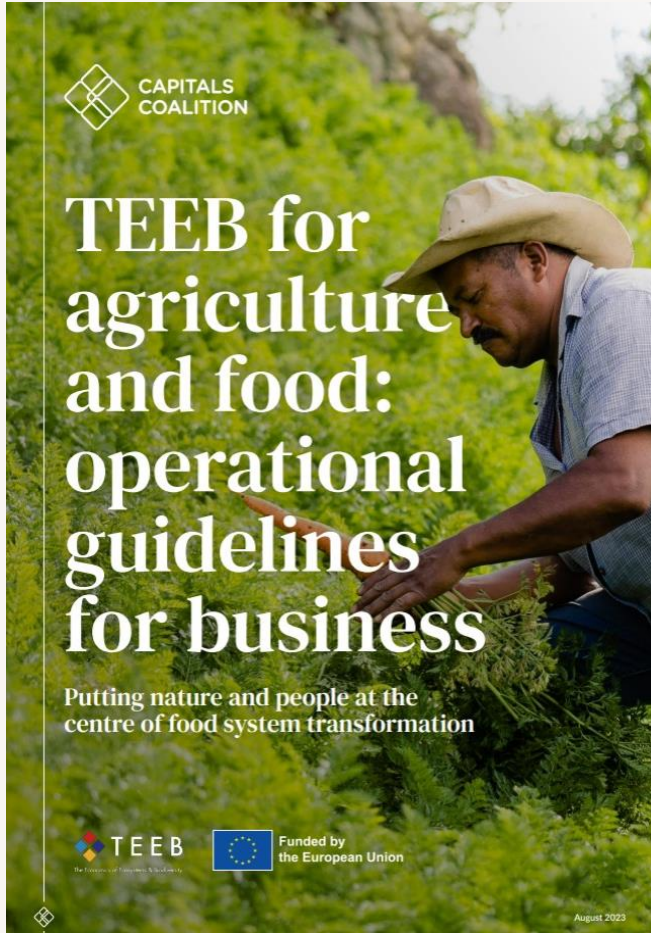


# Pilot applications around the world

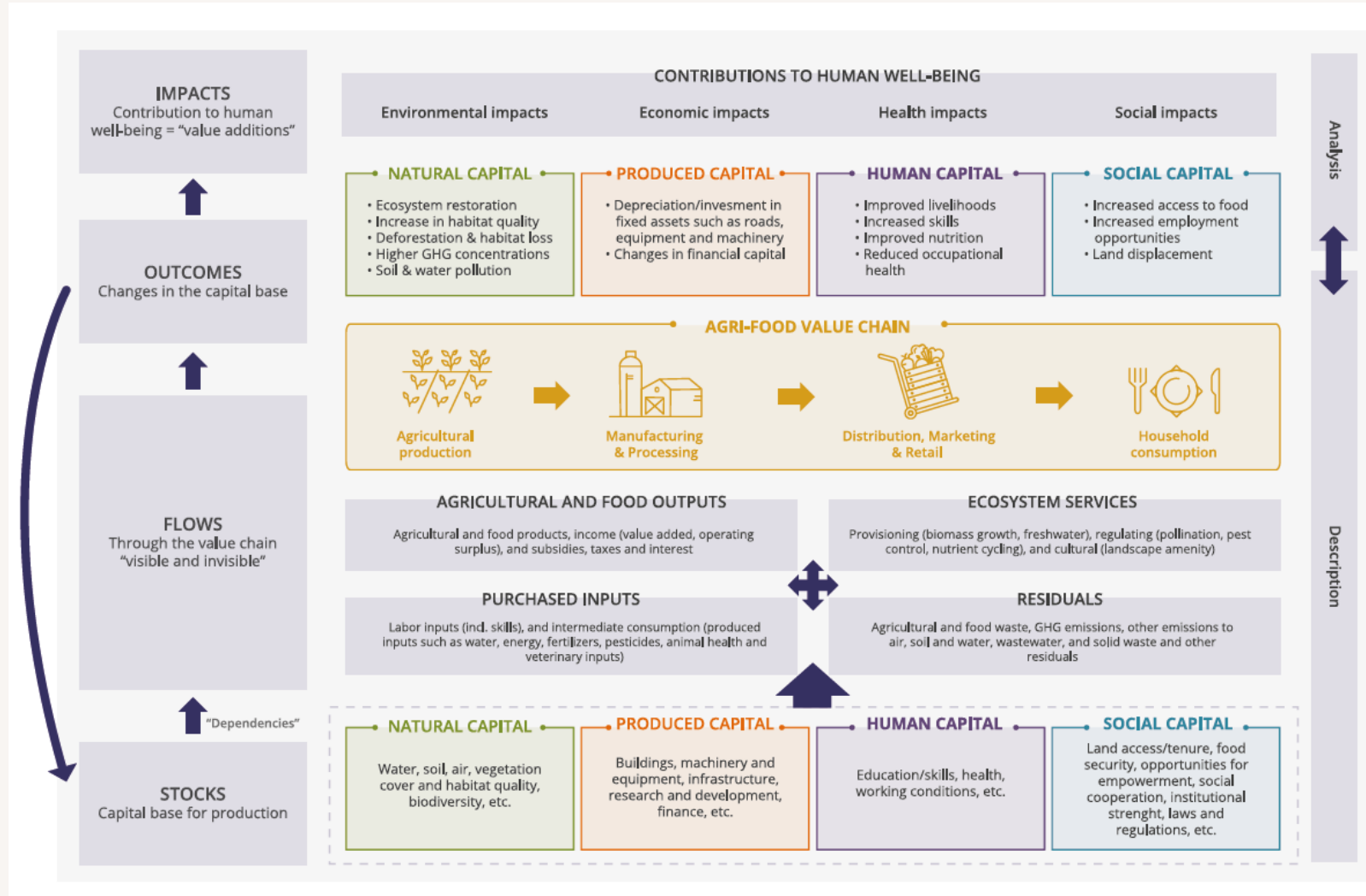




# The Operational Guidelines for Business

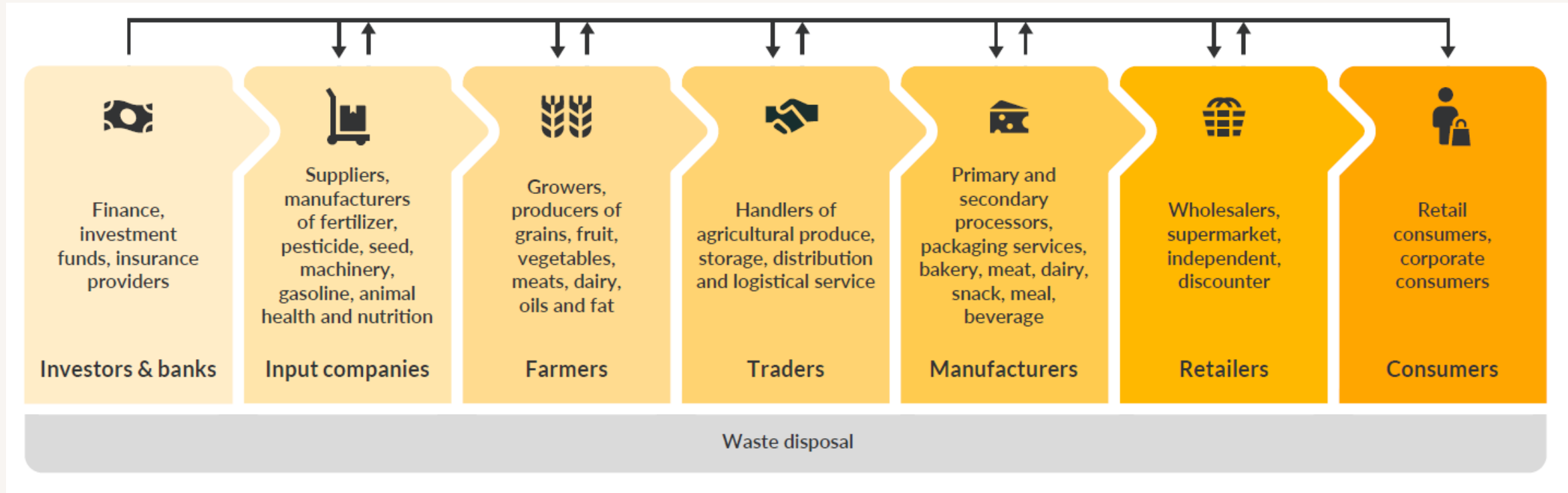


# TEEBAgriFood framework



Developed by 150 academics from 33 countries. Source: TEEB for Agriculture & Food (2018): Scientific and Economic Foundations.

# The Agri-Value Chain





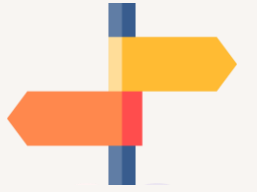
# Guidelines Structure



# Potential use of an assessment

- Inform business core strategy
- Support companies in achieving sustainability goals
- Improve disclosure and reporting to shareholders and investors
- Enhance accounting practices to embed natural capital assets in balance sheet
- Inform investment priorities based on rate of return for each capital





# TEEB Framework applications

## Objective & Results



**Arvind**  
FASHIONING POSSIBILITIES



**Objective:** Evaluate the human and ecological cost of water use per kilogram of seed cotton. It's an option comparison between Better Cotton principle and conventional practices.  
**Results:** Results show that they reduced by 49% the damage to human health and ecosystem quality.



**Objective:** Effectively communicate the uniqueness and positive impacts of its business model on nature and people.  
**Results:** 10% decrease in food loss, 18% reduction of production cost, 7.5% increase in (farmers) income levels. 14% reduction in production cost due to less chemical inputs



**ASYX**  
Good And Beneficial Tech



**Objective:** Assess positive impacts of pineapple leaf fiber upcycling for textile supply chains.  
**Results:** more efficient water use, reduction of waste, creation of secure jobs and contribution to local growth





# Module 1

## Chapter 1.5

**Your business case  
&  
Real business applications**



**CAPITALS  
COALITION**

# User Template



# Your business case

## 1 Get started

**Outputs that you should achieve from this step:**

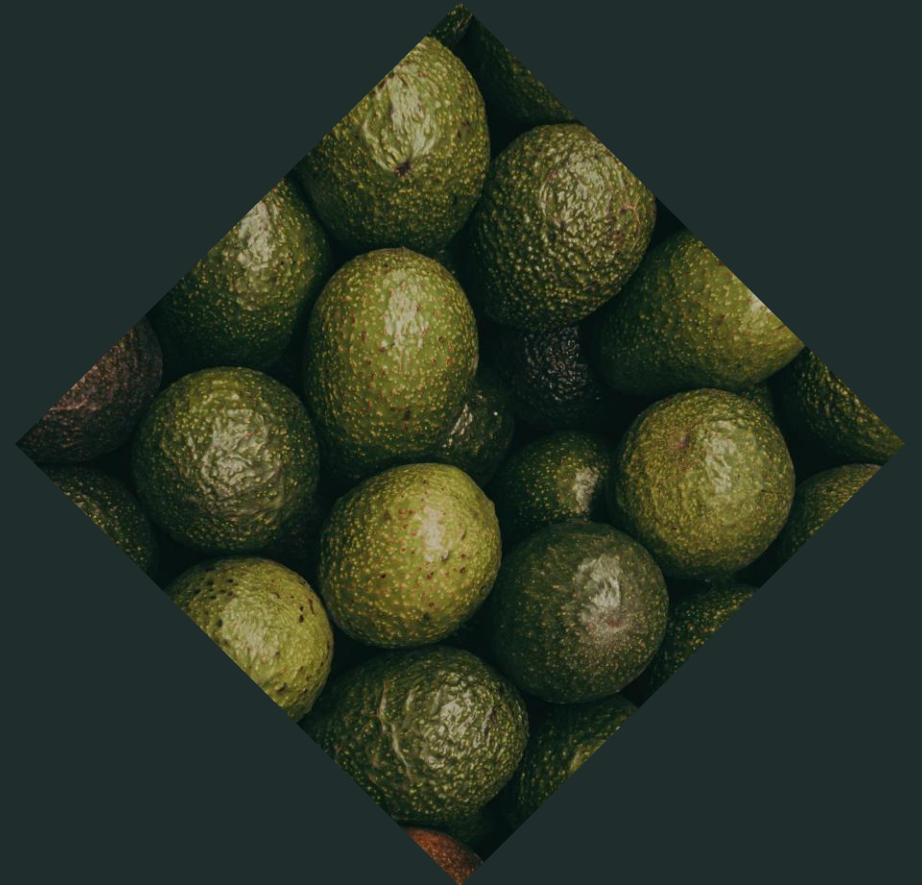
- ◆ An understanding of the concept of capitals and of stocks, flows, and values.
- ◆ An understanding of the interactions between capitals.
- ◆ Identification of your business applications.
- ◆ Support for the assessment from key business stakeholders.
- ◆ An initial understanding of the resources needed to carry out an integrated capitals assessment.



# Banorte - Mexico

## Agricultural risks and opportunities for the financial sector

Banorte is a large financial group in Mexico. Since 2012, the bank manages social and environmental risks in its financing portfolio



# Banorte - Mexico



## Frame: WHY

Explore methodologies to quantify financial implications of risk and opportunities in the value chain they provide services to

# Astral ESG Investment - China

## Natural capital accounting to preserve bio- and cultural diversity and foster an ecological economy

Astral ESG is an investment company active in agri-food systems working with local farmers and indigenous communities. The company is based in Yunnan, China's most biodiverse and mostly ethnically diverse province





# Astral ESG Investment - China



## Frame: WHY

Working in unique Yunnan landscape motivated Astral to identify where their activities create impacts or rely on dependencies. They aim to develop natural capital accounts to reflect Chinese public system of *Gross Ecosystem Value*



# Module 1

## Chapter 1.6

**WHY**  
**Get started**



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# Frame Stage

## Why?

### What is the Frame Stage?

The Frame Stage helps you to frame why you would undertake a capitals assessment

Step	Question that this Step will answer	Actions
<b>1</b> Get started	Why should you conduct a capitals assessment?	<hr/> <p>1.2.1 Familiarize yourself with the basic concepts of capitals</p> <hr/> <p>1.2.2 Apply the concept of capitals to your business context</p> <hr/> <p>1.2.3 Prepare for your assessment</p>



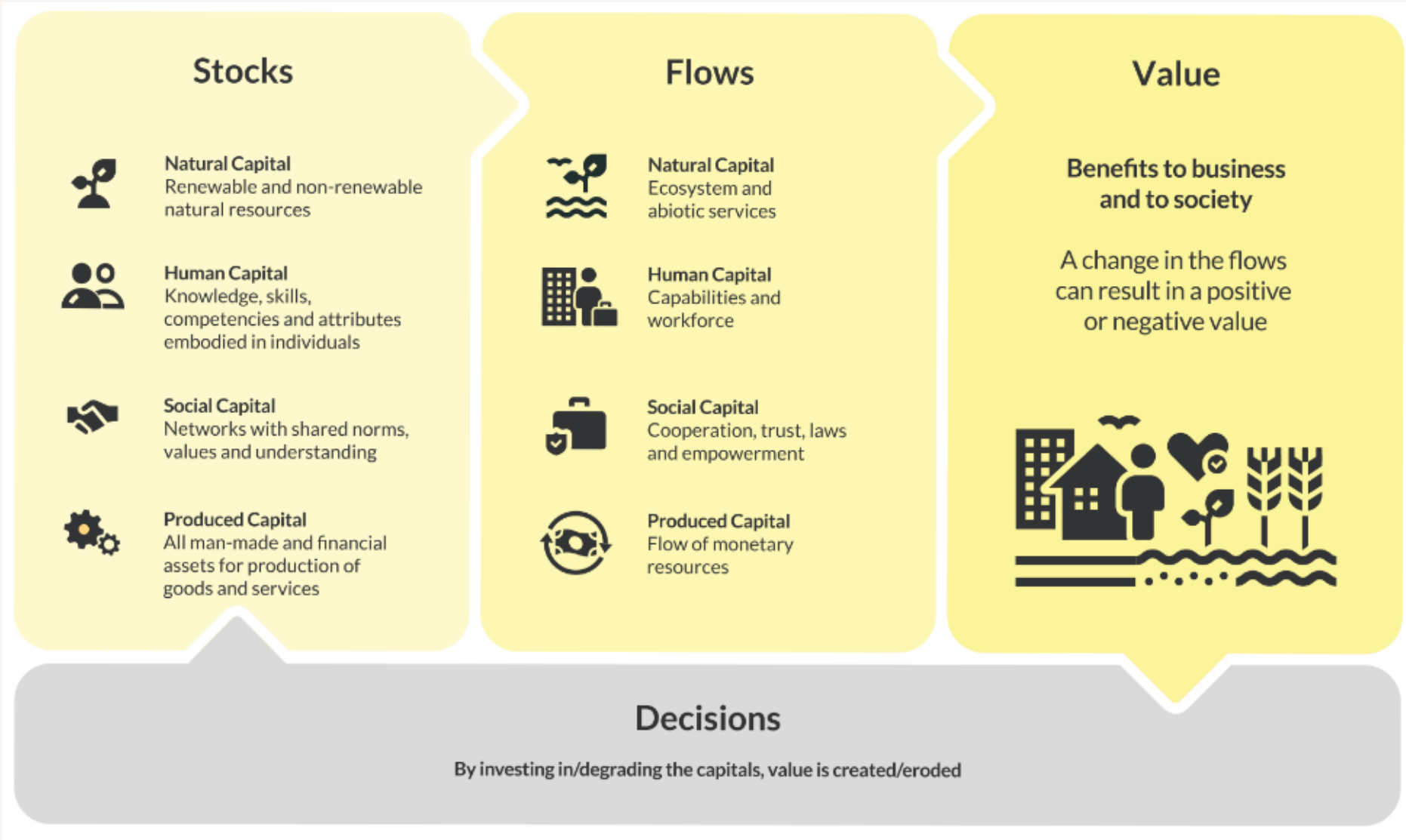
# Step 1



**You are here**

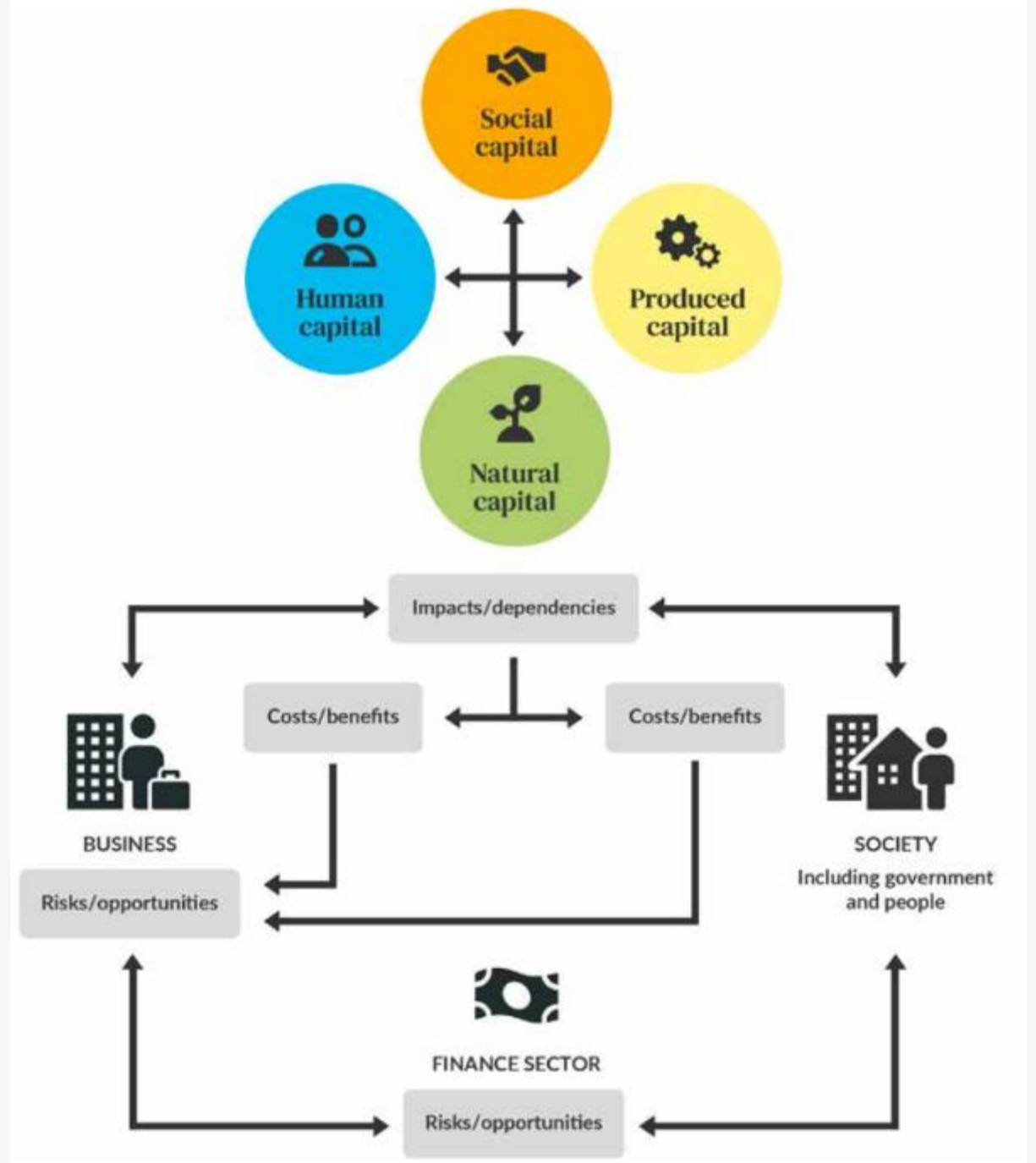
**Question:  
Why should you  
conduct a capitals  
assessment?**

# Foundational concepts of capital stocks, flows and values

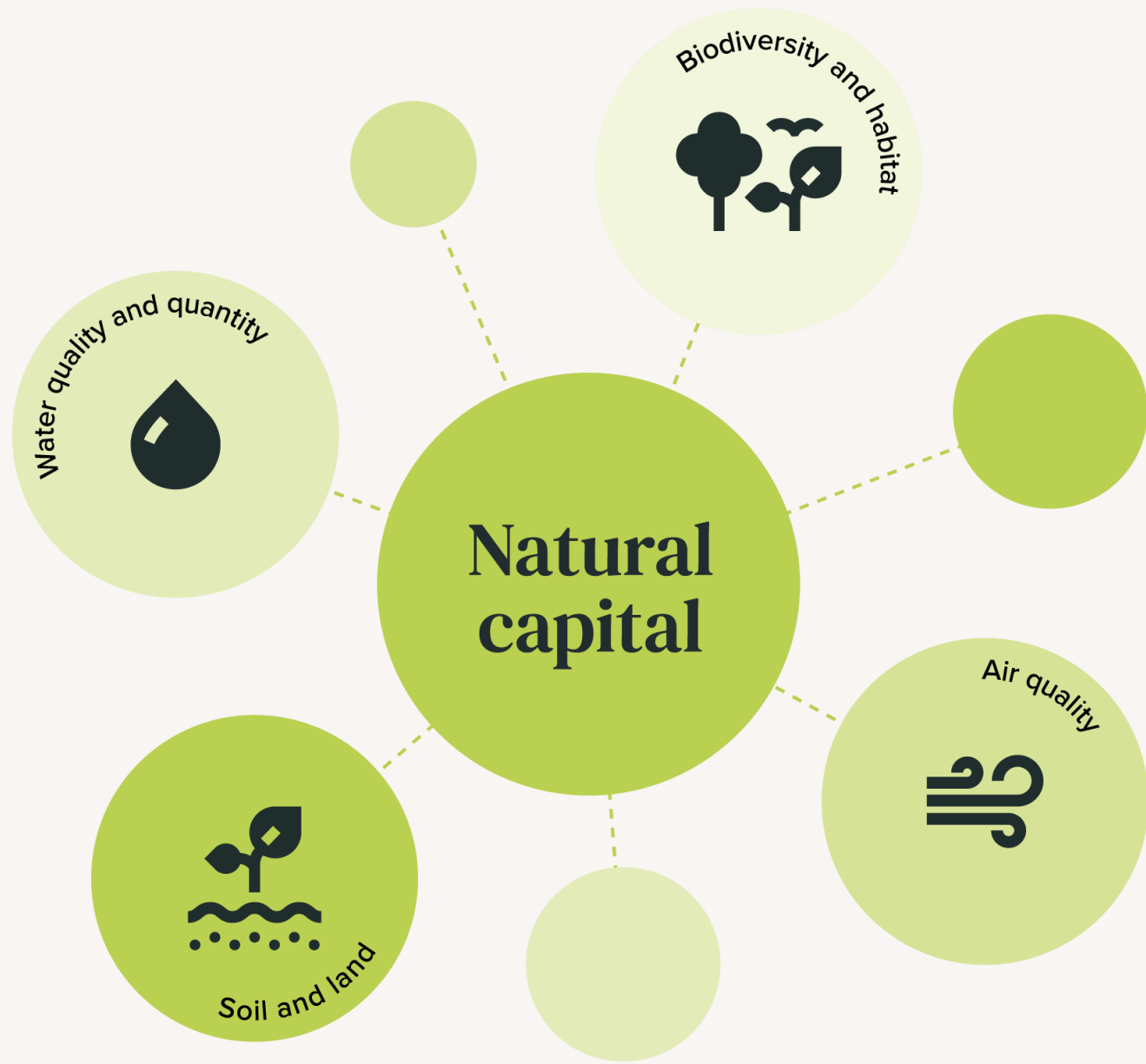


# Conceptual model

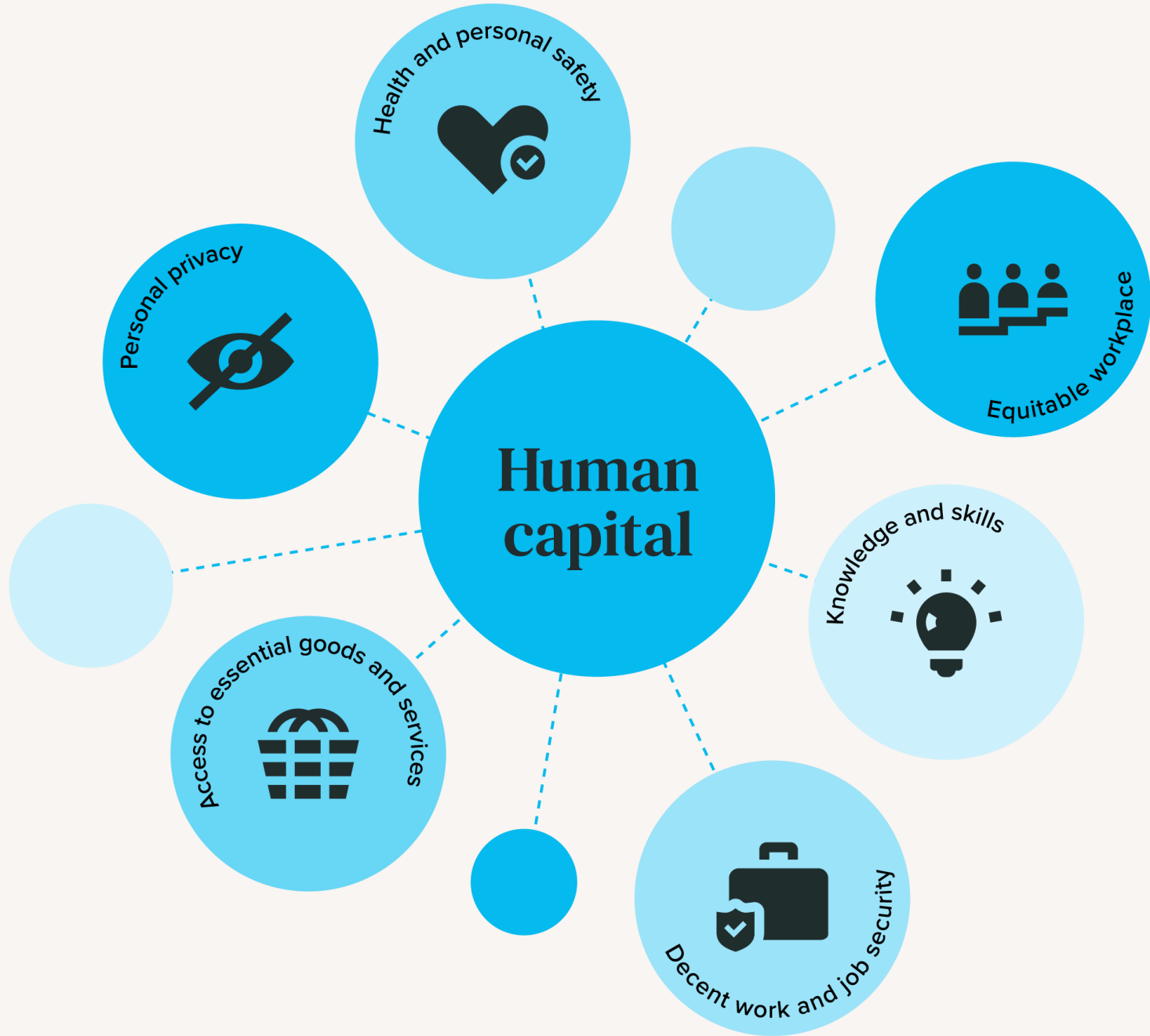
## Capitals impacts & dependencies



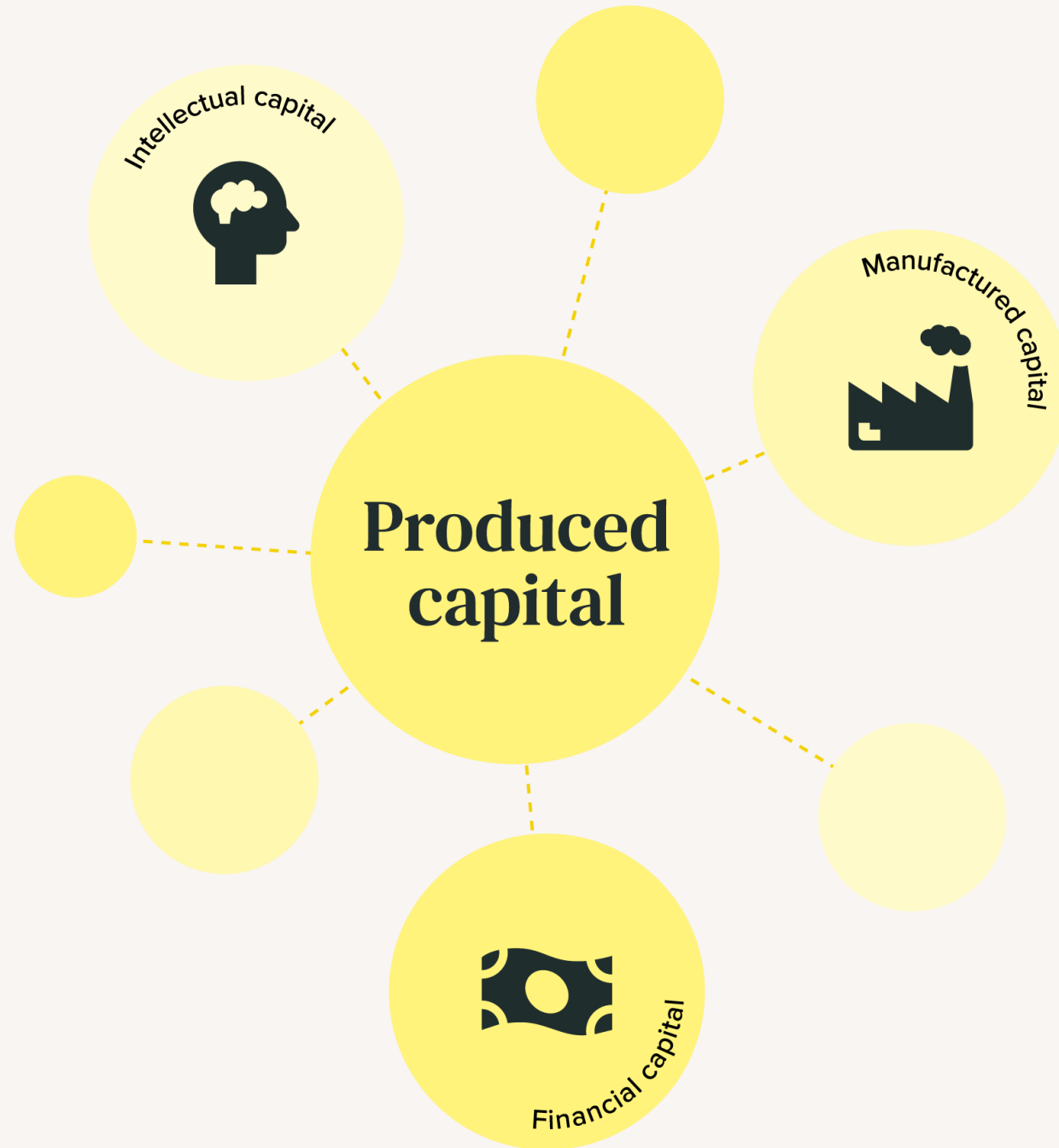












# Reflection exercise

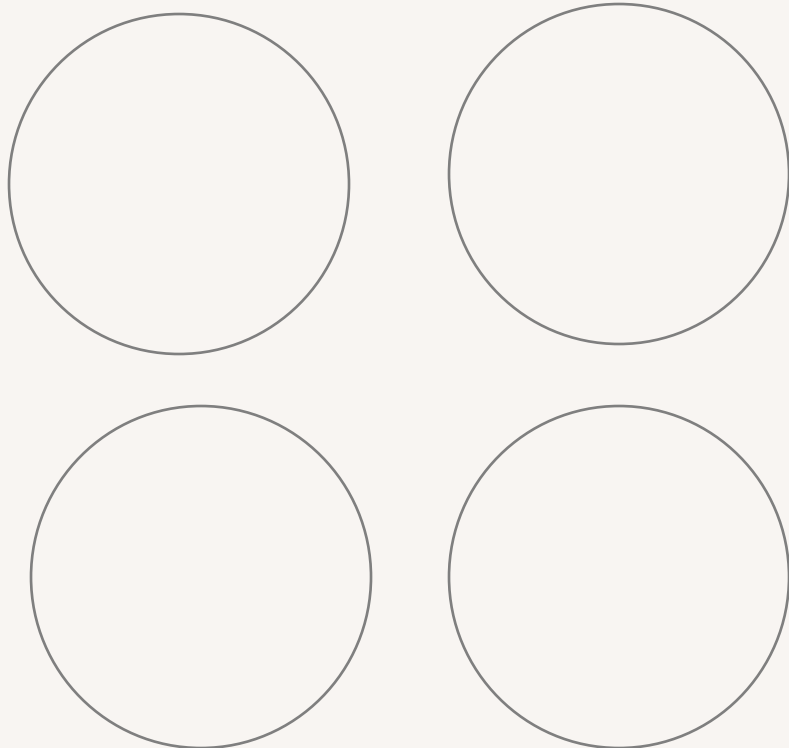


Open your workbook to apply  
your new knowledge

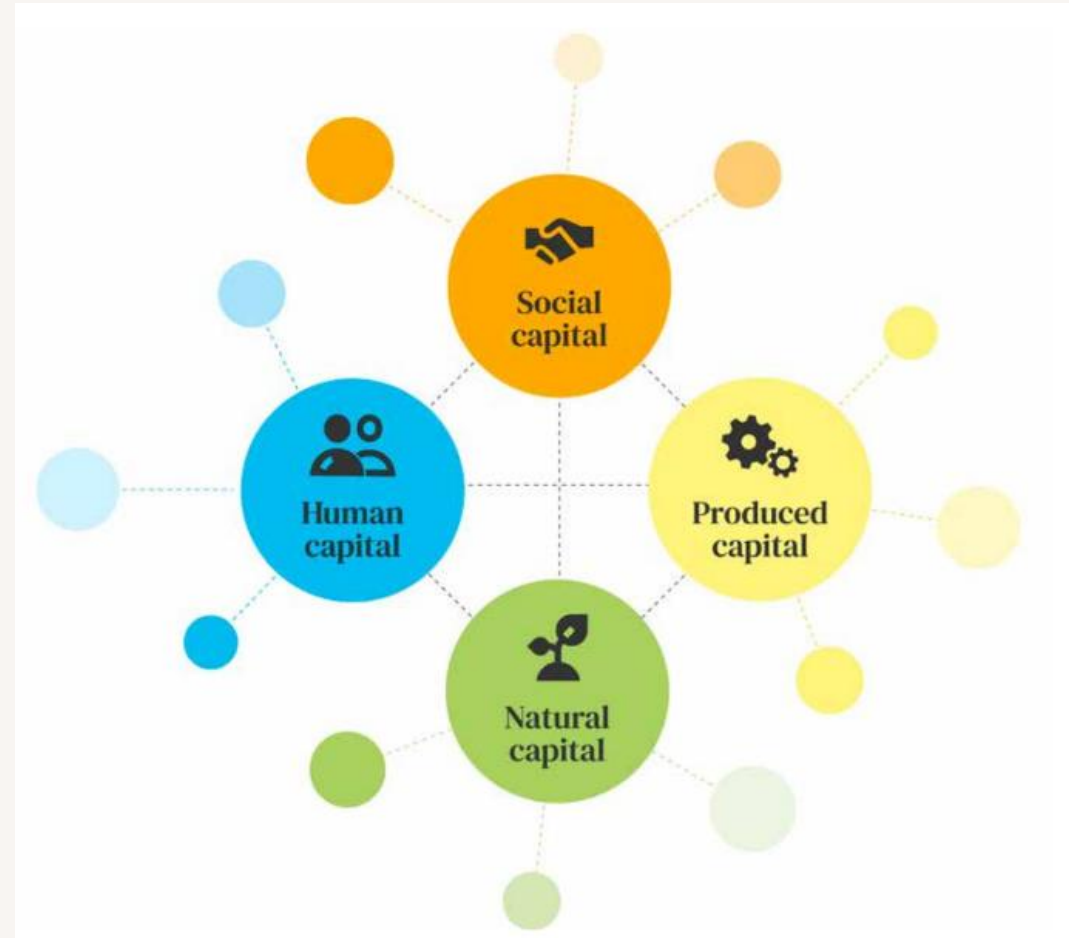


# Capitals of interest: 5 min

Circle one or more capitals that would be interesting to assess in your business



Four empty circles arranged in a 2x2 grid, intended for users to circle their choice of capital to assess in their business.





# FRAME STAGE: Why?

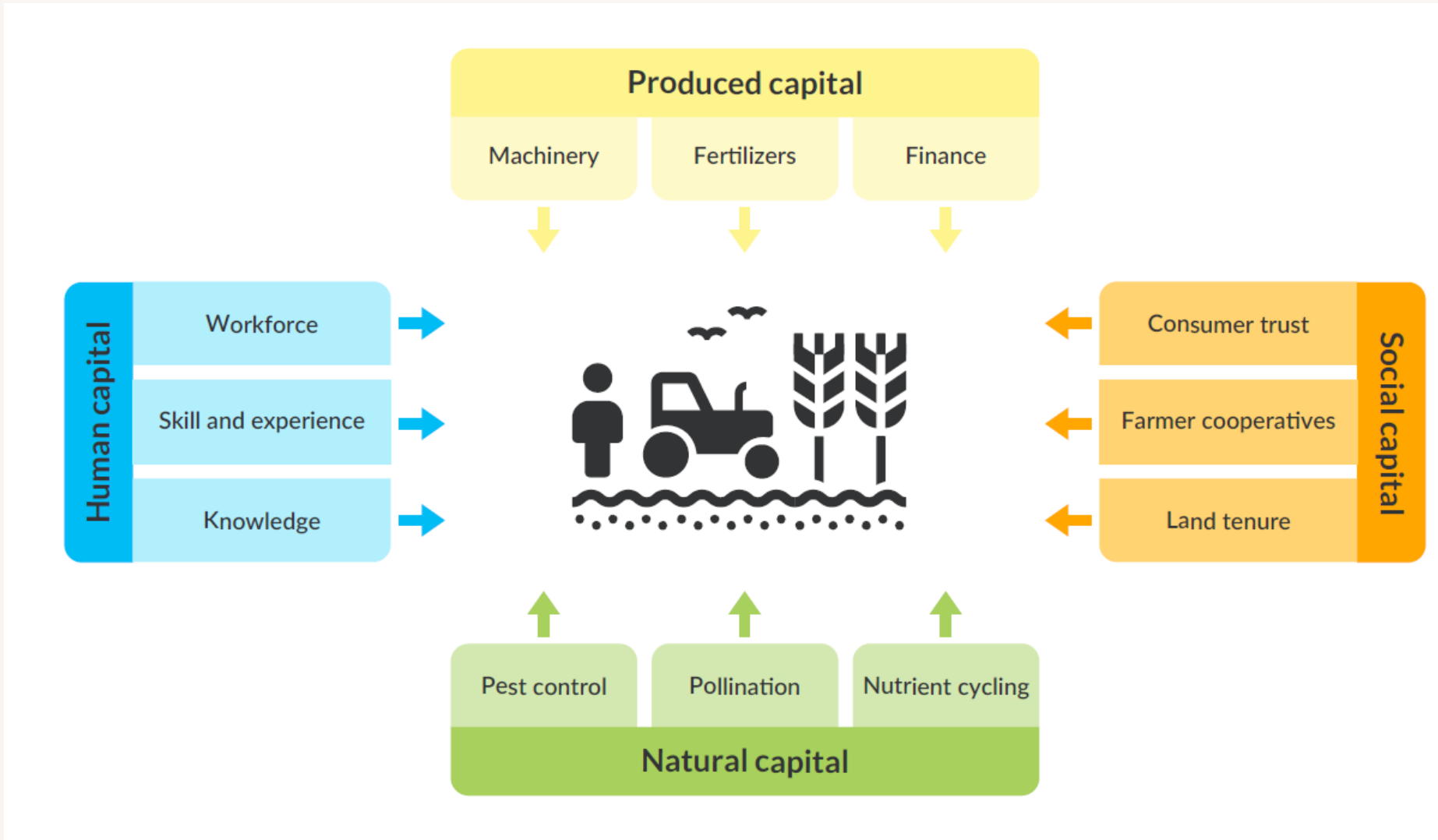
What is your context?

It's a complex system!



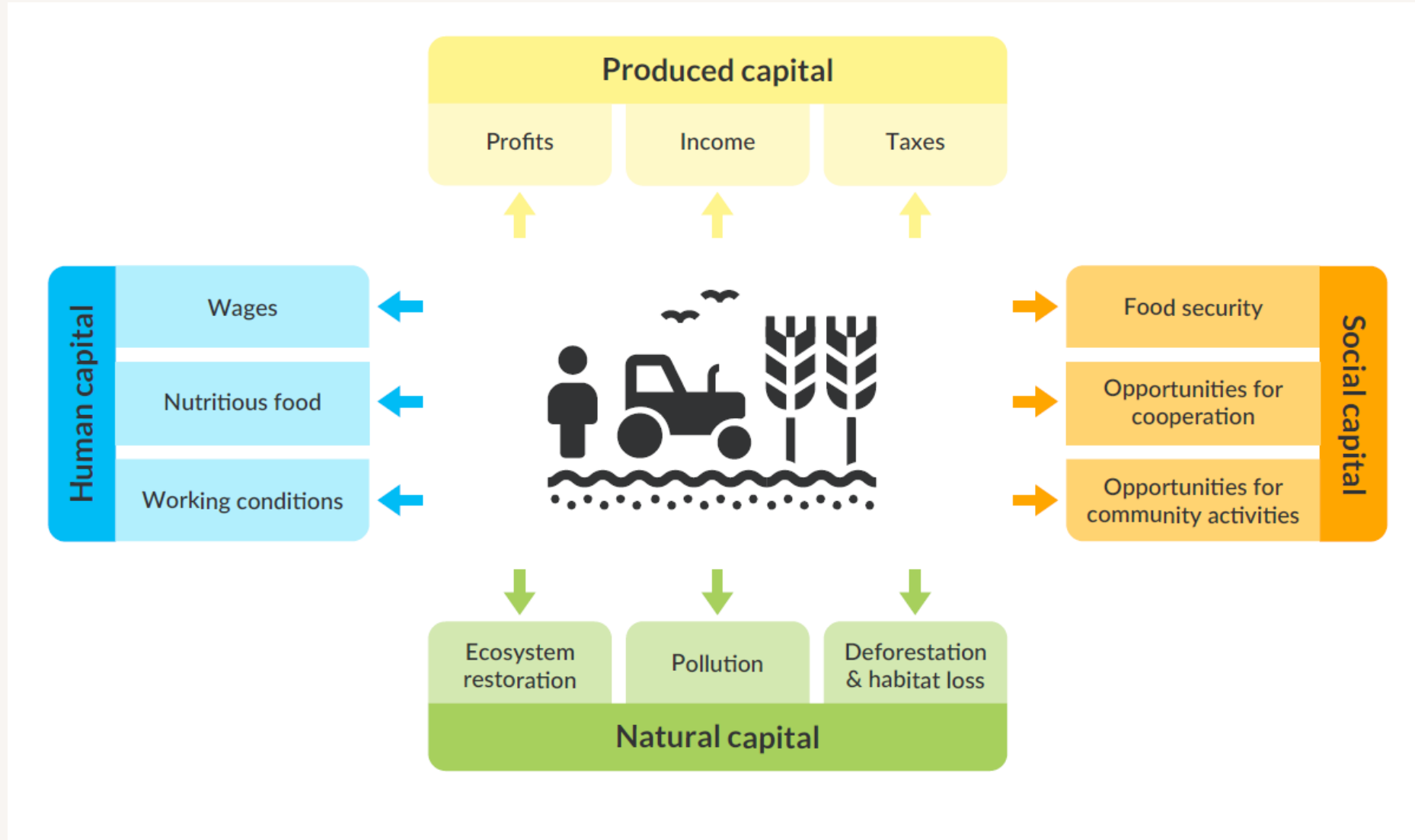
# FRAME STAGE: Why?

Examples of food business **dependencies** on capitals



# FRAME STAGE: Why?

Examples of food business **impacts** on capitals





# FRAME STAGE: Why?

Examples of interactions between capitals

A producer plants native species near a water course

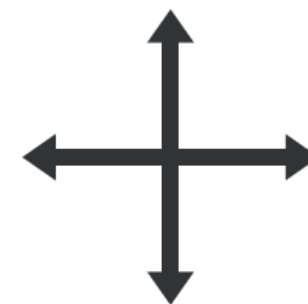


A green rounded rectangle containing an icon of a plant growing in water. The text inside reads: "Biodiversity and ecosystem services enhancement (i.e. water remediation)" and "Natural capital".

A yellow rounded rectangle containing an icon of a dollar bill with an upward-pointing arrow. The text inside reads: "Increase in income due to payments for ecosystem services from downstream water users" and "Produced capital".

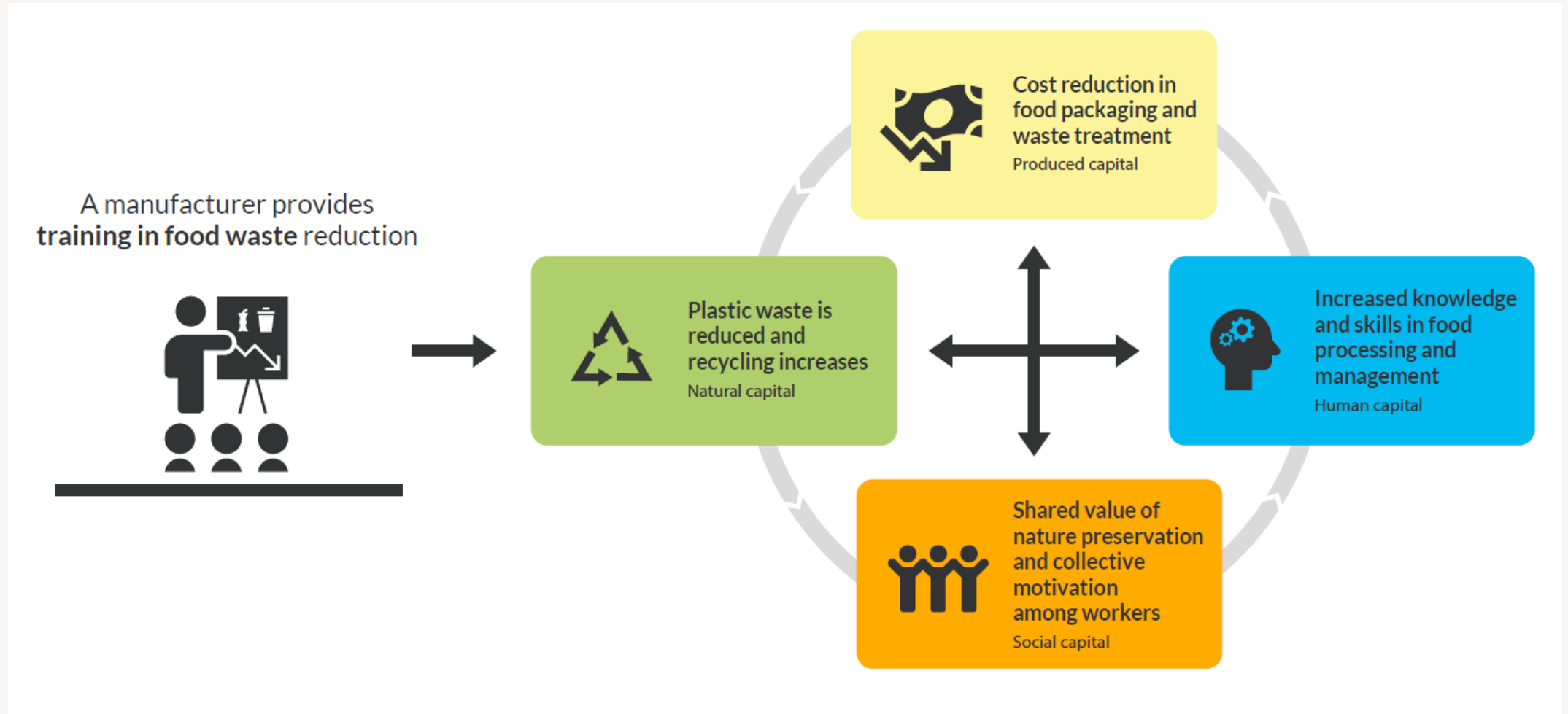
A blue rounded rectangle containing an icon of a heart with a checkmark. The text inside reads: "Improvement in health of local people due to improved air and water quality and recreational space" and "Human capital".

An orange rounded rectangle containing an icon of a house and two people. The text inside reads: "Communities meet in restored space and cooperate in preservation" and "Social capital".



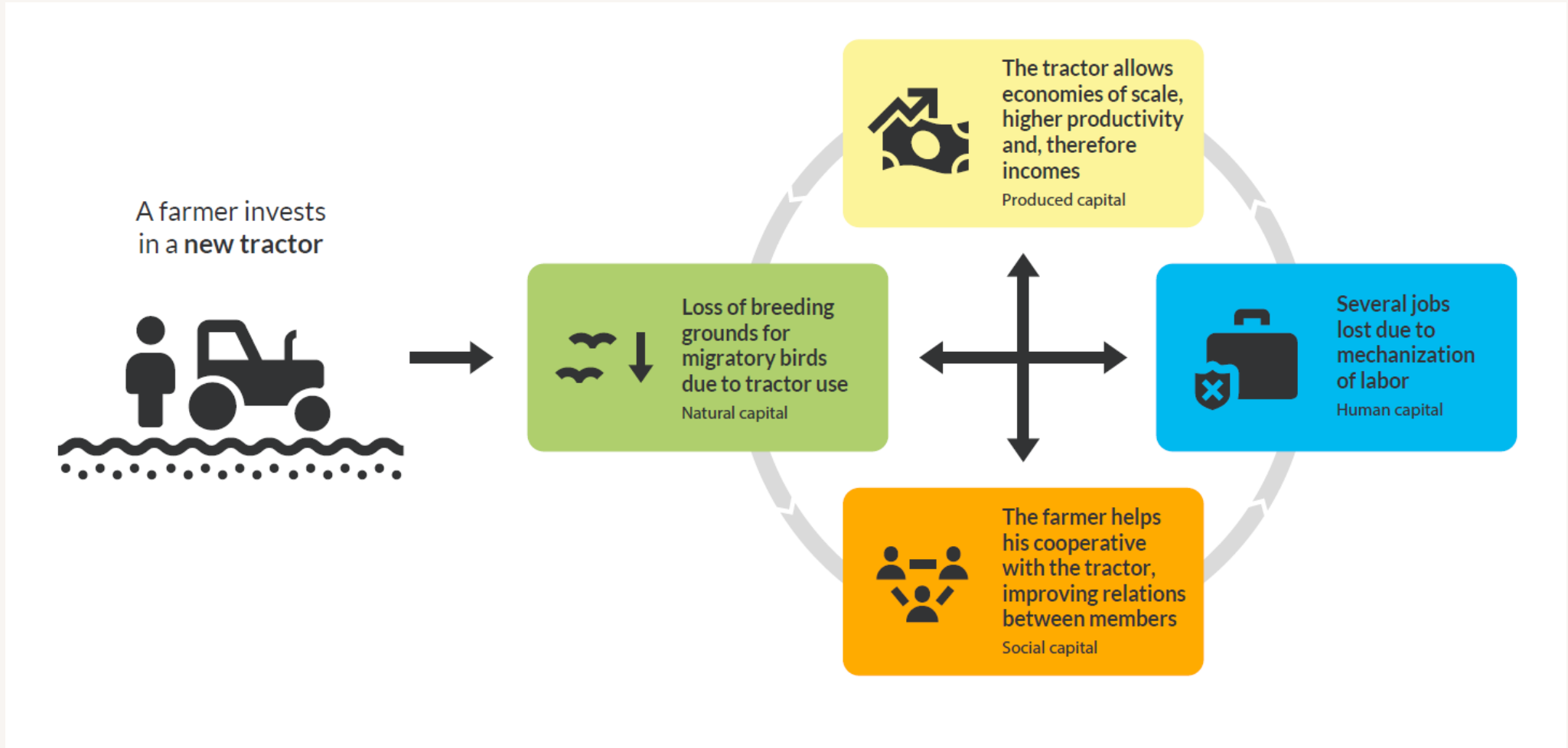
# FRAME STAGE: Why?

Examples of interactions between capitals



# FRAME STAGE: Why?

Examples of interactions between capitals



# FRAME STAGE: Why?

## Example of capital risks and opportunities

Many capital **risks and opportunities** are becoming increasingly visible, and **business needs a way to understand and manage these.**

### Operational

- Increasing cost of scarce resources
- ✓ Increased efficiency due to higher skilled workforce

### Reputational & marketing

- Loss of customer trust due to untransparent value-chain
- ✓ Better sales due to certification for sustainable practices

### Societal

- Health impacts on local communities
- ✓ Tax cuts favoring low-emission from new equipment

### Legal and regulatory

- Increased compliance cost on carbon emissions
- ✓ Competitive advantage over future legislation

### Financing

- Higher interest rates of a loan due to bad ESG score
- ✓ Improved access to funding due to good gender equality ratios



# FRAME STAGE: Why?

Potential business applications for your capitals assessment



**Evaluate impacts** & dependencies  
assess **risks and opportunities**



**Compare options**  
and transform outcomes



**Estimate total/net impact values**  
and commit to targets



Assess impact on **stakeholders**



Internal and/or external **communication & reporting**

# FRAME STAGE: Why?

Potential business applications for your capitals assessment



**Evaluate impacts** & dependencies  
assess **risks and opportunities**

## Real life application



Assessed upstream tomato sauce production to understand how different impact drivers in tomato sauce production create positive impact

## Specific objectives

1. To quantify the creation of shared value along the value chain from raw materials to product's end of life
2. To provide new insights to guide future work.

# FRAME STAGE: Why?

Potential business applications for your capitals assessment



**Compare options**  
and  
transform outcomes

## Real life application

**METRO**

Metro compared their food delivery services with their supermarket, looking at economic efficiencies and net positive impact on customers

## Specific objectives

To assess the differences in environmental and social costs and benefits between Metro's supermarkets and food delivery services

# FRAME STAGE: Why?

Potential business applications for your capitals assessment



**Estimate total/net impact values** and commit to targets

## Real life application

**eosta**

Eosta (SME) valued the net impact of their fruit and vegetables to create an integrated profit and loss account (IP&L)

## Specific objectives

To value the total impact of their organic fruit and vegetable production on natural, social and human capital



# FRAME STAGE: Why?

Potential business applications for your capitals assessment



Assess  
impact on  
**stakeholders**



**Rabobank**

Carried out an assessment to create a tool to reward dairy farmers through supply chain partners and other stakeholders

## Specific objectives

To identify new revenue models in the supply chain

To develop KPIs quantify individual dairy farmer contribution to biodiversity

# FRAME STAGE: Why?

Potential business applications for your capitals assessment

## Real life application

## Specific objectives



Internal and/or  
external  
**communication  
& reporting**

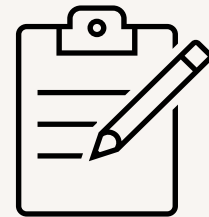


Olam used a social and human capital assessment to value the impact of agricultural interventions for Indonesian farmers using the Social Return on Investment Framework. The results are in their annual report

The assessment aims to demonstrate to customers how they positively impact farmers livelihood through:

- Good Agriculture Practices training for 10 000 cocoa farmers
- Coaching
- Demonstration plots
- Nurseries support

# Reflection exercise

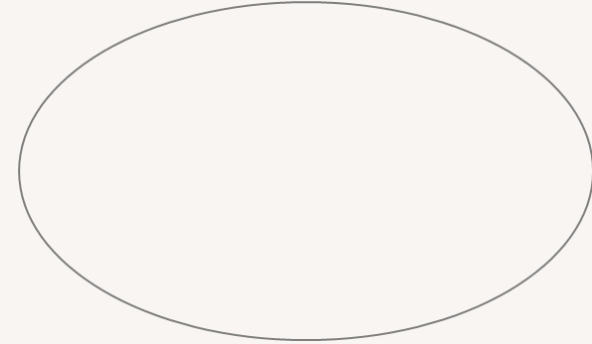


Open your workbook to apply  
your new knowledge



# Potential business application: 5 min

Circle the business application that you could apply for a capitals assessment in your business



**Evaluate impacts & dependencies**  
assess **risks and opportunities**



**Compare options**  
and  
transform outcomes



**Estimate total/net impact values** and  
commit to targets



Assess  
impact on  
**stakeholders**



Internal and/or  
external  
**communication & reporting**





# Module 1

## Chapter 1.7

Summary of lessons  
learned



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# Check-in: learning objective acquired



Now, you have:

- Understood the learning objectives of the training
- Learned about the **challenges and the solution to preserve value** for nature, people and business
- Been introduced to the TEEBAgriFood Guidelines for business and the first stage: **Frame (WHY?)**
- Been familiarized and have practiced with the **key concepts** of the capitals approach:
  - natural, social, human and produced capital
  - stocks and flows
  - impacts and dependencies
  - risks and opportunities
- Been inspired by potential **business applications** and how a capitals assessment could be used in your own business context

# Key highlights



- ❖ **Nature loss, climate change and rising inequality are major challenges.** The planet and societies has boundaries, that if overshoot, represents serious risks to business.
- ❖ A capitals approach is **a solution to preserve and create values.** It focuses on **impacts and dependencies** and goes beyond measurement to include valuation.
- ❖ By including the value of all capitals in their decisions, business can be part of the solution to **deliver a fairer, just and more sustainable world.**
- ❖ Capital describes **asset that stores or provides value** to people. If we invest in them, they create value. If we degrade, we erode value.
- ❖ Natural, human, social and produced capitals are **interconnected.** The framework brings additional insights into the Sustainable Development Goals
- ❖ Capitals Coalition started as TEEB for Business. The TEEBAgriFood framework analyses how the capitals interact with the agri-food **value chain** and how they contribute to **well-being.**



# Key highlights



- ❖ The TEEBAgriFood Operational Guidelines for Business has **four-stages**: frame, scope, measure and value, apply. It can be used to **inform strategy**, achieve sustainability goals, improve **reporting**, enhance accounting practices and **inform investment** priorities.
- ❖ The frame stage ask the question "why should you conduct a capitals assessment"? To get started, understand stocks, flows and value, define the context and identify risks & opportunities.
- ❖ There are several business applications:
  - ❖ evaluating impacts and dependencies and **assess risks and opportunities**
  - ❖ estimate net impact values and **commit to targets**
  - ❖ **compare options** and **transform** outcomes
  - ❖ internal - external **communication** and reporting
  - ❖ assess impacts on **stakeholders**.
- ❖ To apply this to your business you are invited to answer the questions of the Frame Stage in the **user template**



# Collaborative online platform



The screenshot shows a Facebook group page for 'TEEB AgriFood'. The header image is a lush green tea plantation on a hillside. A 'Manage group' button is visible in the top left of the image. Below the image, the group name 'TEEB AgriFood' is displayed. To the right of the name is a profile picture of a woman and a 'Joined' button with a dropdown arrow. Below the group name, there are navigation links: 'Live feed' (highlighted in yellow), 'Members', 'Events', 'Media center', and 'Forum'.

## [TEEB AgriFood Community](#)

# Thank you



CAPITALS  
COALITION

Partner's logo



Funded by the  
European Union

