

# Why and How can SSAP be best used by Japanese Soy Industry

Kenji Fuma  
CEO, Neural, Inc.  
Adjunct Professor, Shinshu University

# About Kenji Fuma

CEO, Neural, Inc. / Adjunct Professor at Green Social Co-creation Institute, Shinshu University  
BA, The University of Tokyo / MBA, Thunderbird School of Global Management  
Master of Liberal Arts Sustainability, Harvard Extension School

## Businesses, Financial Institutions

### Sustainability management and ESG financial adviser

- Advisers to prime TSE-listed companies and major financial institutions
- Advisor to start-ups and VCs (ICJ).
- External director (TSE Growth listed, Valuence HD)
- Internal committee member (MUFG, T&DHD, SBKK, Ajinomoto)

## Central Government Ministries and Agencies

### Ministry of the Environment

- Member of the study group on 'Basic Matters' of the Basic Environmental Plan.
- Selection Board Member, Japan ESG Finance Award
- Select Committee member, Principles for Financial Action in the 21st Century (Minister of the Environment Award)

### Ministry of Agriculture, Forestry and Fisheries

- Expert member, Food, Agriculture and Rural Policy Council
- Secretariat of the Council for Agricultural, Forestry and Fisheries Technology, Member of the Advisory Board for the Survey of Trends in Different Overseas Sectors
- Member of the Committee on Decarbonization of Food Supply Chain
- Member of the study group on food supply chain visualization demonstration and demonstration support

### Ministry of Health, Labour and Welfare

- Member of the Committee on Creating a Sustainable Food Environment that Makes you Naturally Healthy

## Municipalities

Hokkaido-city, Nemuro-city, Himeji-city

## NGOs

Board member, Water Aid Japan  
Board member, MASHING UP

## Sport

Co-opted Member, Executive Committee (Part-time)  
J.LEAGUE

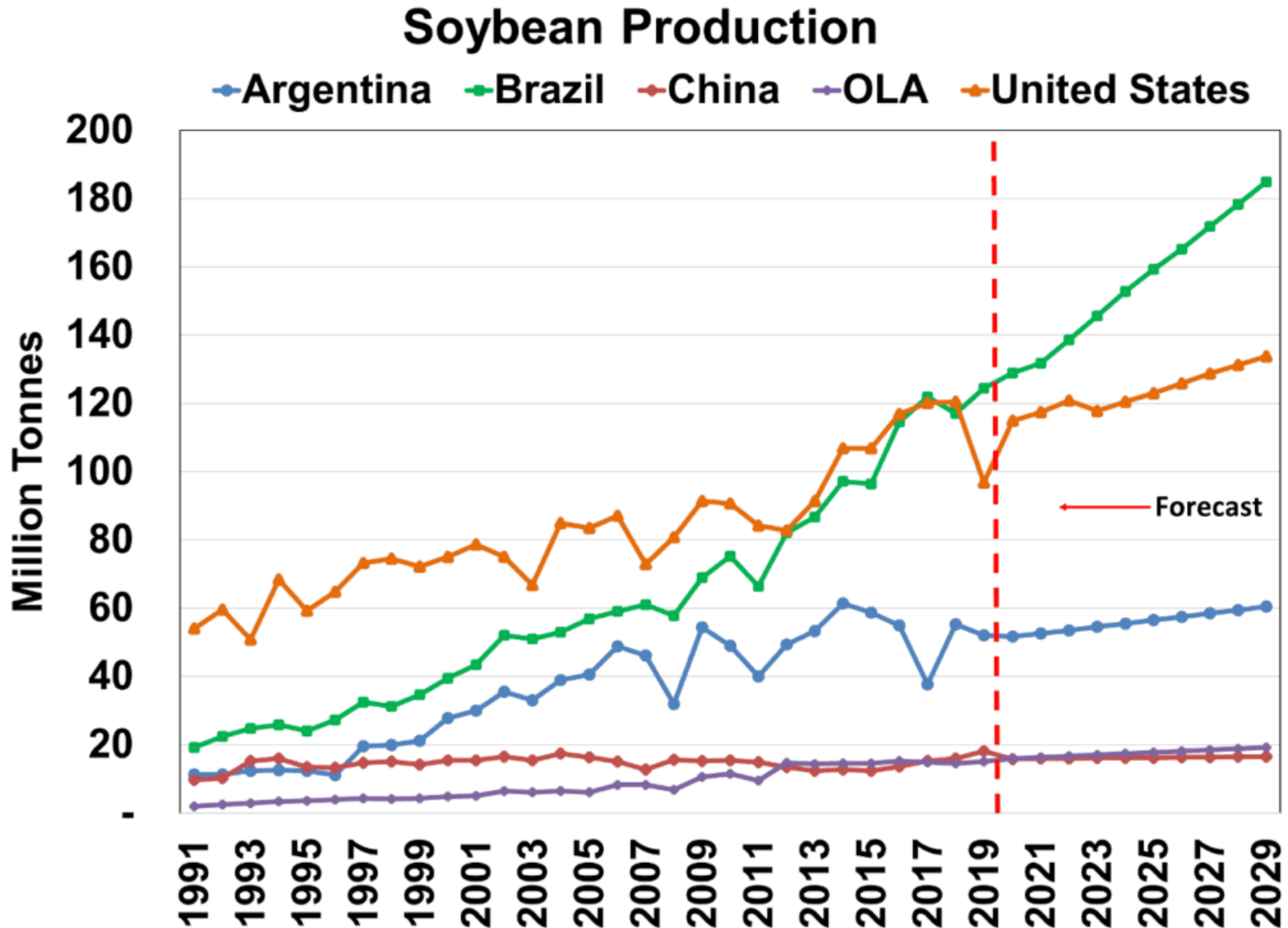
## International conferences

Committee Member of Socio-Economic Panel of the Hague  
International Space Governance WG

## Medias, Speeches

- Commentary on television, radio, newspapers and magazines
- Speeches at the World Bank, United Nations University, EU, Liberal Democratic Party, Constitutional Democratic Party of Japan, Japan Federation of Bar Associations, Institute of Certified Public Accountants, Japanese Institute of Auditors, JA Zen-Noh, etc.

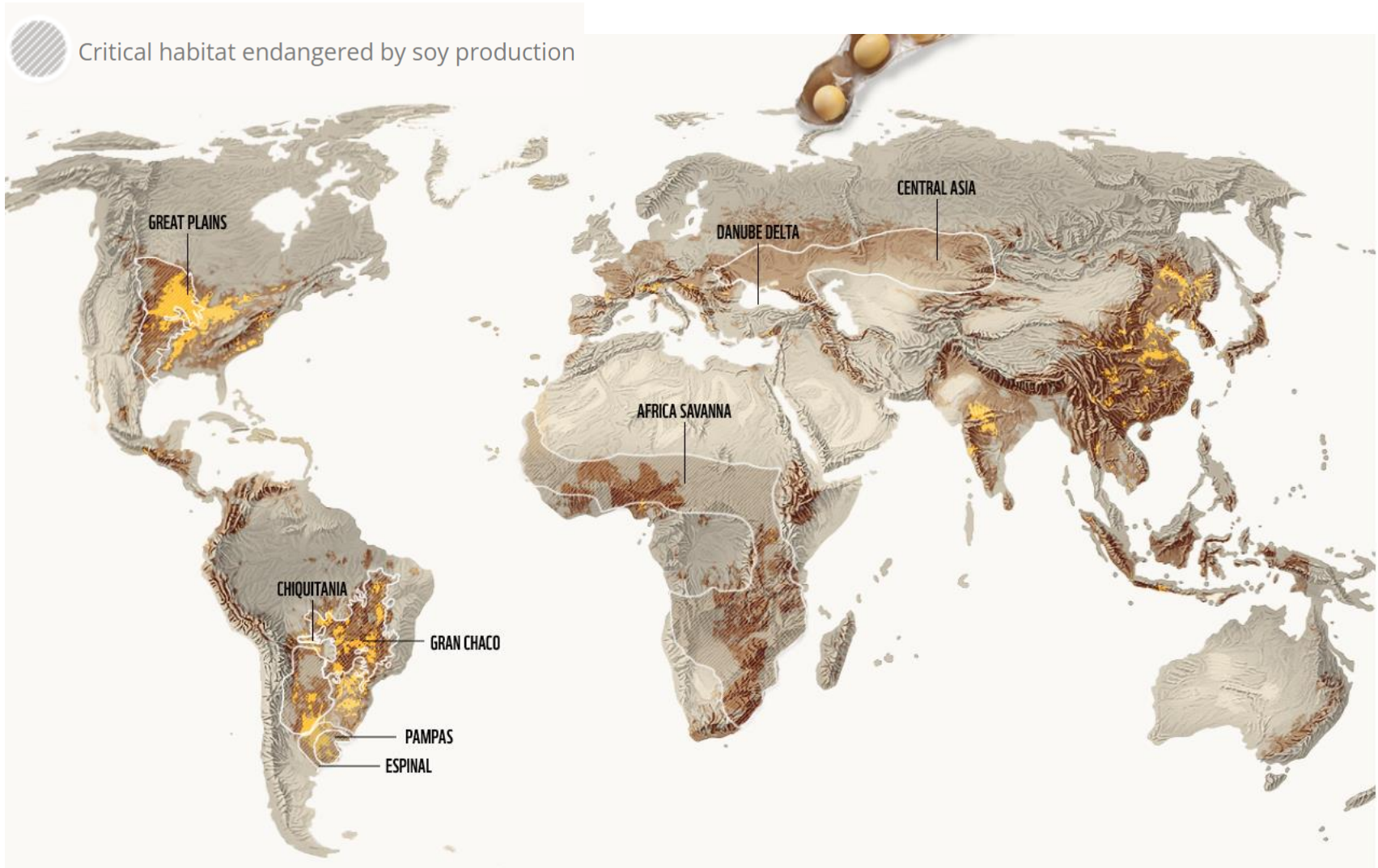
The soy market is expected to grow significantly in the future.





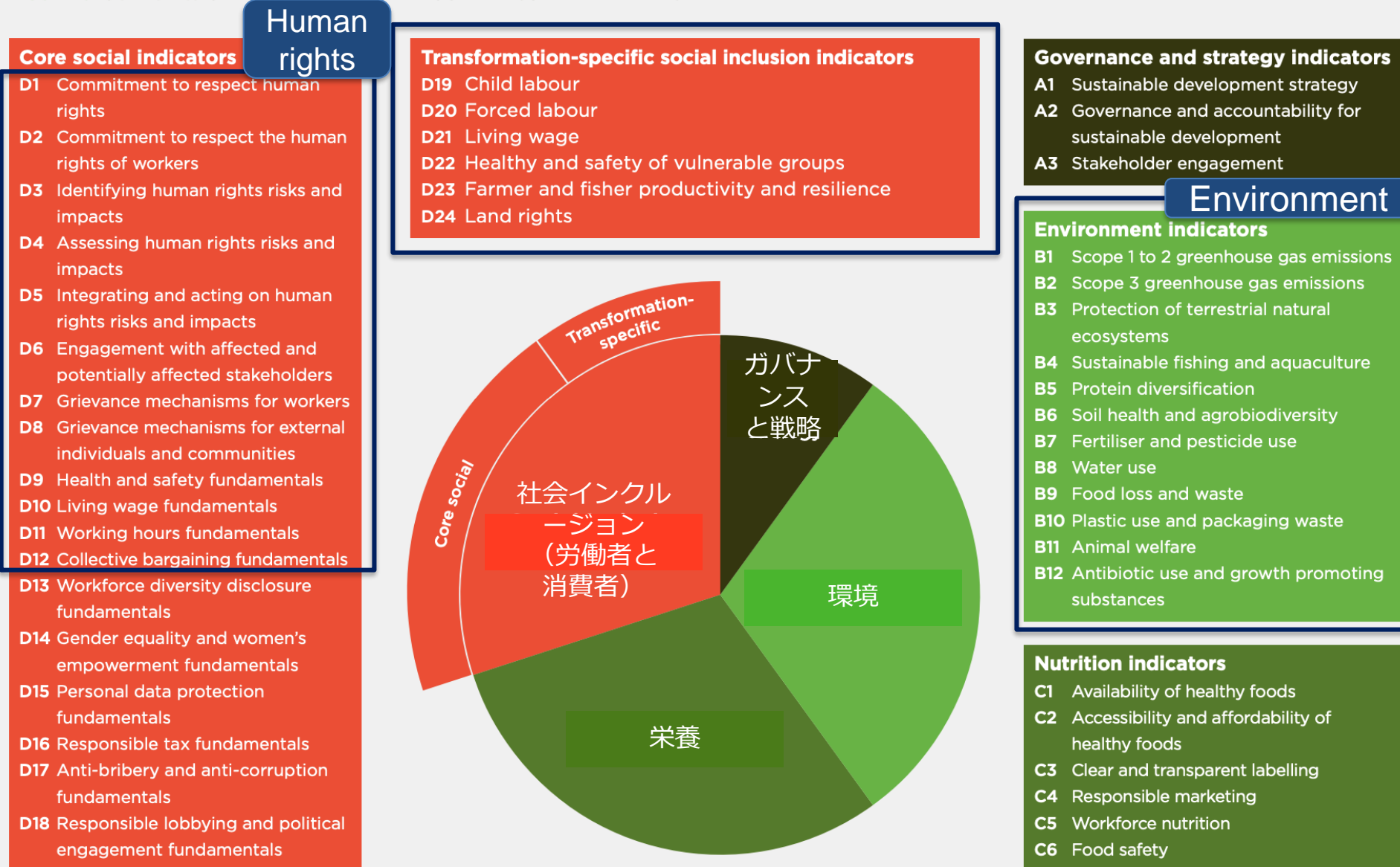
# Ecosystem disruption risks are not limited to South America.

- The risk of ecosystem disruption from soy production extends to the Great Plains.



# Components of food and agriculture assessments by the WBA.

FIGURE 5: OVERVIEW OF INDICATORS IN THE FOUR MEASUREMENT AREAS

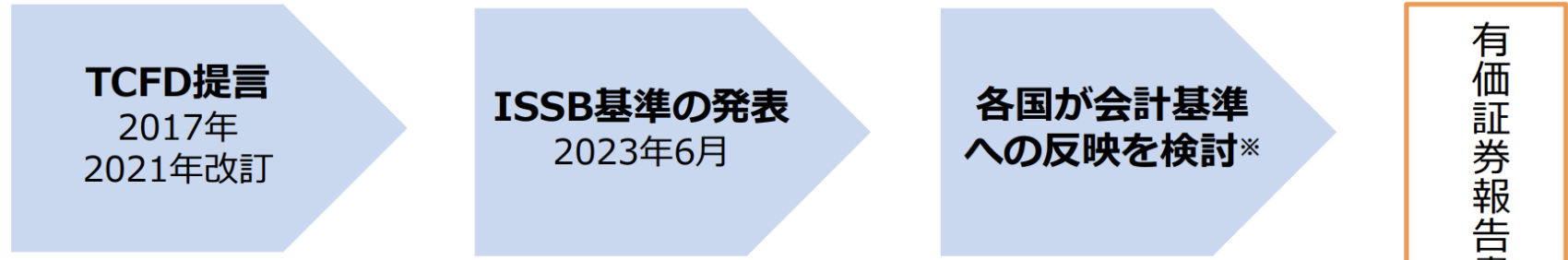


# Sustainability disclosure, including raw materials, being enhanced.

## (参考) サステナビリティ開示の義務化

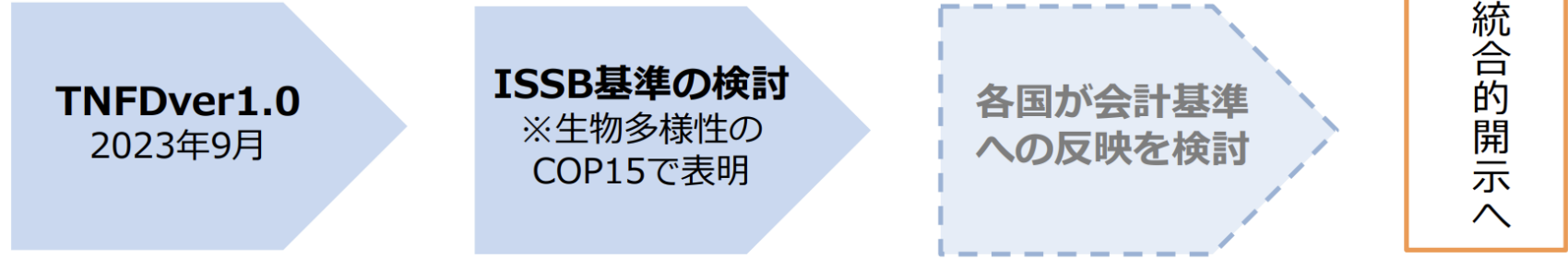
気候変動にかかる情報開示は、任意開示に始まったが、**国際サステナビリティ基準審議会 (ISSB) による標準化を経て、各国の会計基準に順次適用される予定**であり、生物多様性・自然資本にかかる情報開示も同様の流れになると見られている。

### 気候変動



※ EU、英、シンガポールは採用日は検討中

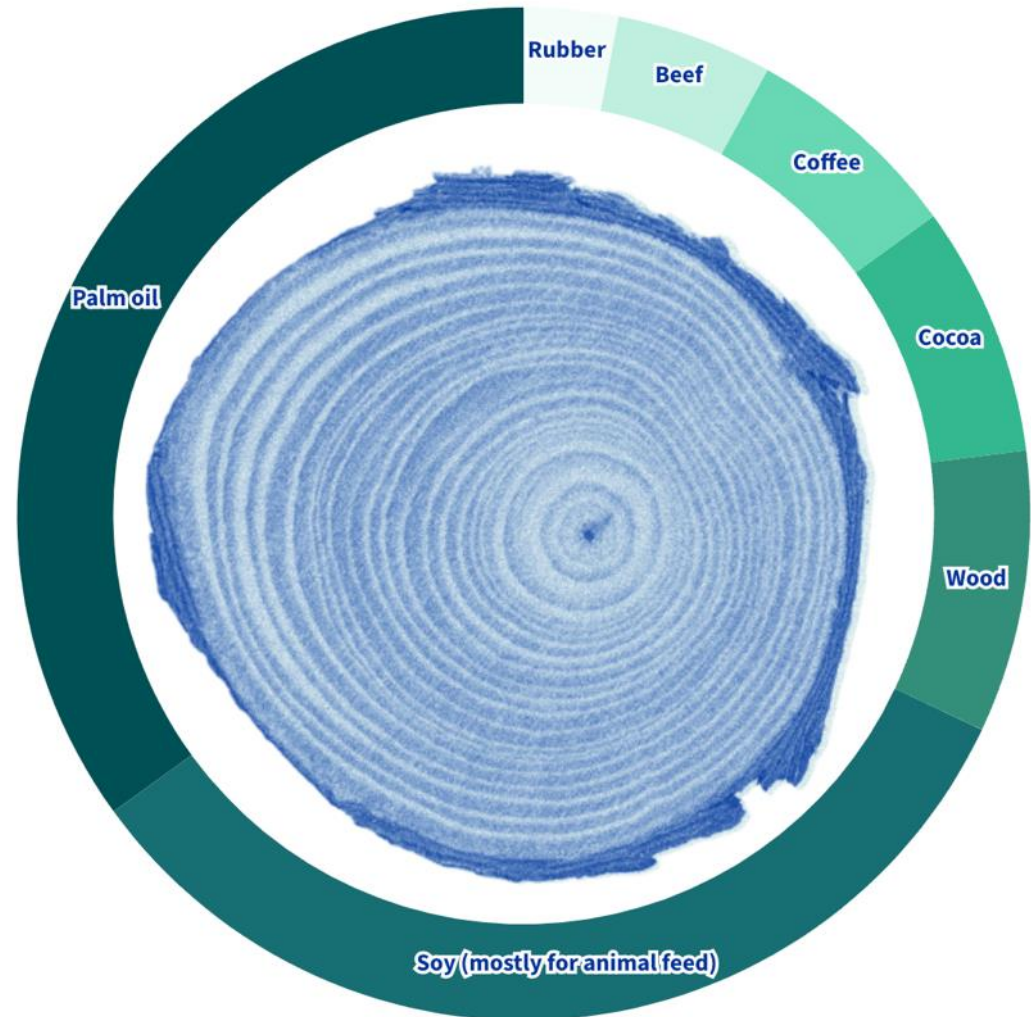
### 生物多様性・自然資本



任意 → 義務

# EU mandate to prevent deforestation linked to soy production.

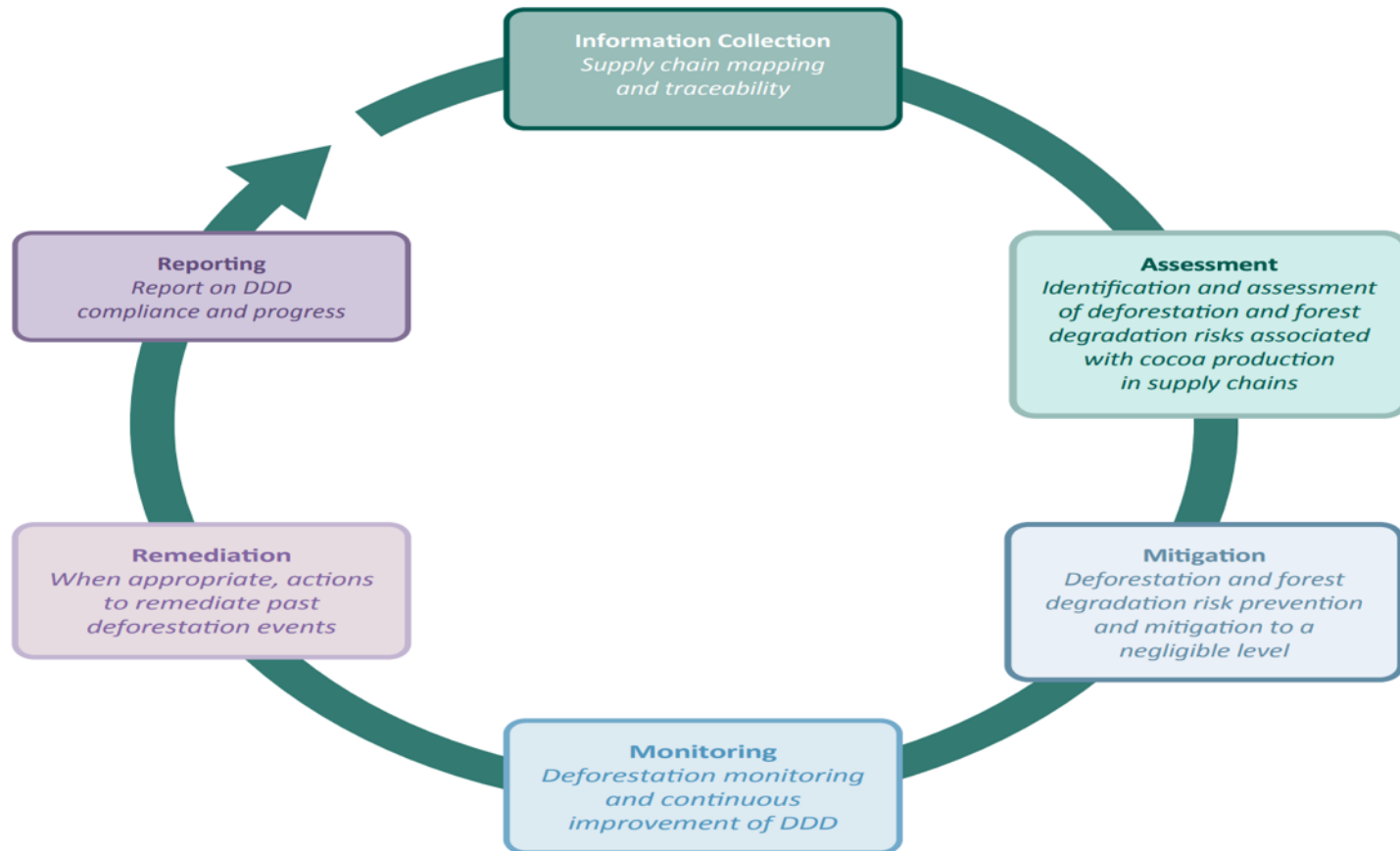
Which of the goods causes the most deforestation?



European Commission, 2008-2017. The figures are rounded.

# Content of the EU Deforestation Regulation (EUDR).

## Obligation to conduct due diligence



Products involved in deforestation are banned from sale and import within the EU by the end of 2020.



# How to meet the demand for traceability?

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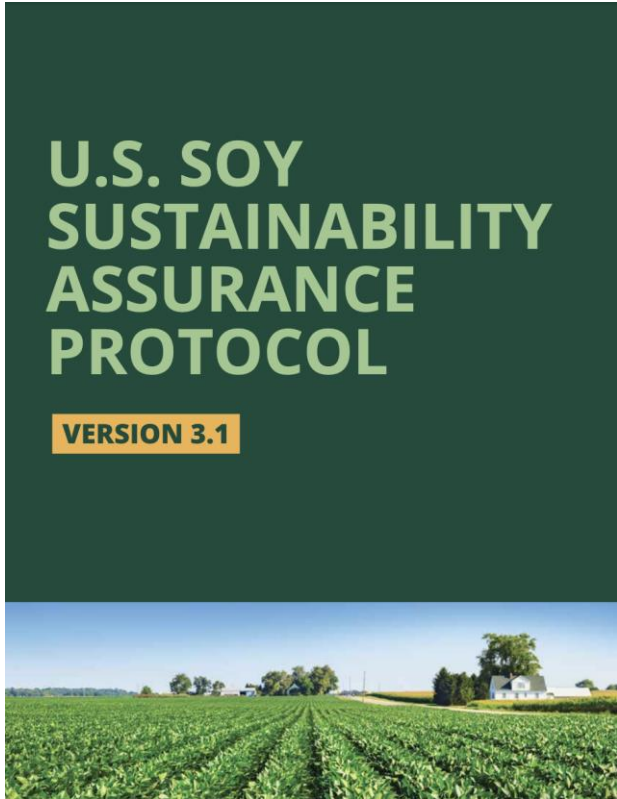
Ensure traceability to farms.

OR

Use reliable raw material certification

# Significance of SSAP utilization.

## Four criteria.



Biodiversity

Farm  
management

Labor  
management

environmental  
conservation

### THE U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL

### SUSTAINABLE DEVELOPMENT GOALS

#### 1. Biodiversity and High Carbon Stock Production Control Measures and Regulations

1.1 Land Use, Sensitive Habitats, and Biodiversity



#### 2. Production Practices Control Measures and Regulations

2.1 Soil Health & Productivity  
2.2 Crop Health & Agricultural Best Management Practices  
2.3 Waste & Pollution  
2.4 Greenhouse Gas Emissions, Fossil Fuel Use, & Air Quality



#### 3. Public and Labor Health and Welfare Control Measures and Regulations

3.1 Water Quality & Quantity  
3.2 Plant Protection & Nutrient Management  
3.3 Working Conditions & Labor Relations  
3.4 Worker & Public Safety  
3.5 Community Relations



#### 4. Continuous Improvement of Production Practices and Environmental Protection Control Measures and Regulations

4.1 Continuous Improvement



Specifically,

- Adopt crop rotation, cover crops, nutrient management, no-tillage, etc. to improve soil health
- Soy is not produced in primary or continuous forests, wetlands or peatlands.
- Conservation of farmland at risk of soil erosion, important wildlife habitats, etc. through CRP.

# SSAP comply with international sustainability requirements.

- In December 2021, FEFAC certified the SSAP as compliant with the FEFAC Soy Sourcing Guidelines (2021).

## Members

### Full members



### Associate members



## Soy Sourcing Guidelines (2021)

- Legal compliance
- Responsible working conditions
- Environmental responsibility
- Good agricultural practices
- Respect for legal land use
- Protection of community relations

# SSAP also meets the criteria of the UKRT.

- It has also been recognized as a soy certification program that meets the criteria for forests and native vegetation.

<b>U.S. Soy Sustainability Assurance Protocol</b>	Follow up contact: <b>**other valuable native vegetation**</b> : for the purposes of this piece of work we have looked for evidence that the standard extends landscape protection beyond forests to other native vegetation such as grasslands that may be found in the Cerrado. This is in line with the goal of the UK Roundtable on Sustainable Soya; it remains our intention to work with RT partners globally towards an aligned definition of protected 'native vegetation'.	
<b>Questions</b>	<b>Yes No Partial</b>	<b>Detail</b>
Does the standard require legal compliance?	Yes	Many directives require producers to be in compliance with US laws, for example 1.1.2 requires that "producers are in compliance with U.S. Endangered Species Act" and 1.3.1/1.5.1 that "producers are in compliance with U.S. laws regarding conversion of primary forests to other uses". <i>Reference: U.S. Soy Sustainability Assurance Protocol</i>  Source: <a href="https://28vp741fflb42av02837961y-wpengine.netdna-ssl.com/wp-content/uploads/2017/11/20180416-U.S.-Soy-Sustainability-Assurance-Protocol-low-res.pdf?segid=84b8eae8-a0d6-44e7-8ab2-d1e1edc606fe">https://28vp741fflb42av02837961y-wpengine.netdna-ssl.com/wp-content/uploads/2017/11/20180416-U.S.-Soy-Sustainability-Assurance-Protocol-low-res.pdf?segid=84b8eae8-a0d6-44e7-8ab2-d1e1edc606fe</a>
Does the standard prohibit legal deforestation?	Yes	"Soybeans are not produced on land that was primary forest" or "on continuously forested land". <i>Reference: U.S. Soy Sustainability Assurance Protocol, Directives 1.3 &amp; 1.5</i>  Source: same as above



# Highly commended by the FSA.

- On 25 August 2022, it was rated Silver under FSA 3.0.



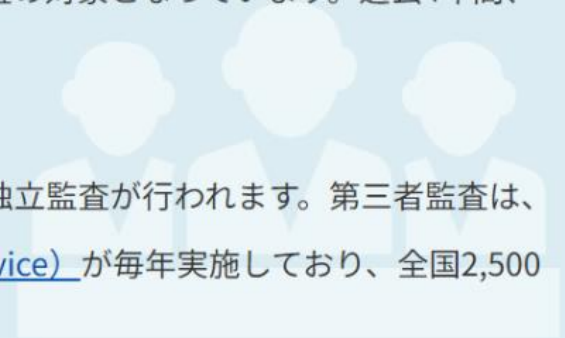
# Independent audits of producers.

- Internal audits by producers and independent audits of producers.

## 監査について

### About Audit

- アメリカの大豆生産者の90%以上がアメリカ農場プログラムに参加しており、監査の対象となっています。過去4年間、年平均22,000件の監査<sup>※2</sup>が行われています。
- 毎年の内部監査は、生産者によって行われています。
- 生産者による内部監査の正確性を確保するために、生産者に対する第三者による独立監査が行われます。第三者監査は、[アメリカ農務省（USDA）の自然資源保全局（Natural Resources Conservation Service）](#)が毎年実施しており、全国2,500以上の事務所に技術スタッフがいます。



# Action launched on soy life cycle greenhouse gas emissions.

- With the growing interest in agricultural emissions, discussions have also begun on the use of the LCA database developed by GFLI.

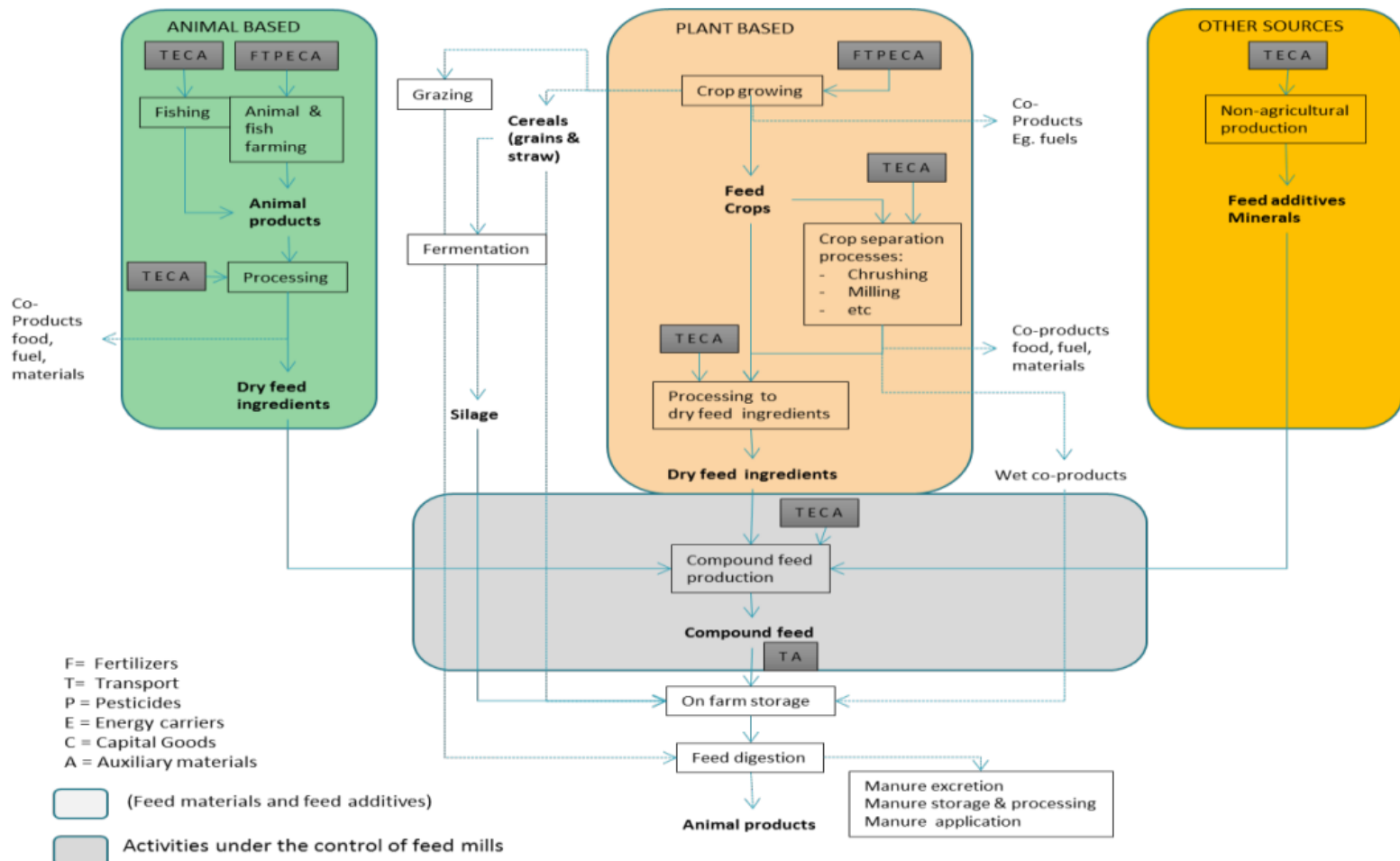


Figure 1 Overview of the production chain of compound feed and other feed flows entering the farm

# Boundaries of the GFLI

- LCA assesses resource use and pollutant emissions during the life cycle of feed ingredients.

The publicly available GFLI database is a collection of feed ingredient datasets collected using Life Cycle Assessment (LCA) methodology. LCA is a method to evaluate the use of resources and emission of pollutants during the life cycle of a feed ingredient. The database contains various types of products, each with a product-specific system boundary:

- Products “at farm”: the environmental impact of cultivated feed products until farm gate. Environmental impacts include inputs for cultivation (e.g. energy, fertilizer, lime, pesticides, etc.) and emissions on the farm (e.g. fertilizer use, pesticides, etc.).
- Marine products “at vessel”: the environmental impact of captured marine products until landing (e.g. energy, gear, refrigerants) and emissions at sea (e.g. guts).
- Products “at plant”: the environmental impact of processed feed materials until processing gate. Environmental impact of processed products includes the impact of cultivation of raw materials, sourcing from different countries, energy and auxiliary material use at processing and waste.

## **Scope-in**

- Primary production (agriculture and fisheries), processing and transport related to the production of feed ingredients.

## **Scope-out**

- Activities not directly related to physical production activities, such as marketing, business travel, commuting, living on a farm, etc.
- Impact of the use of certain feed ingredients on livestock performance (e.g. use of feed additives).



# Reference of LCI data.

- The GFLI basically adopts the framework and rules of the PEFCR, developed by the European Commission, which defines detailed requirements for the implementation of LCA on feedstuffs.

The GFLI methodology adopts the framework and the rules of the feed PEFCR but:

- Prescribes the use of different background datasets than the PEFCR since the PEF data on energy, transport and chemicals cannot be used outside the scope of PEF studies in external communication.
- Allows for the use of more accurate background data for specific regional database development.
- Allows for the use of more accurate emission modelling for specific regional database development.
- Allows for more regular database updates than the PEF database for feed ingredients.
- Allows for the use of several life cycle impact assessment methods, like the methods of the Environmental Footprint (EF3.0) methodology of the European Commission (European Commission, 2019; Fazio et al., 2018) and ReCiPe Midpoint Hierarchy method (Huijbregts et al., 2016).

GHG inventories refer to IPCC guidelines

# SSAs are issued on an application basis.

## SSAP認証取得手続き方法

- SSAPはアメリカ大豆全体が環境負荷が少なく、ステナブルな農業を行っているというスキームが特徴です。
- 食品メーカー、輸入業者、サプライヤーが申請すると無料で発行!
- 登録コストはゼロ!



SSAPを発行しているのはソイ・エクスポート・サステナビリティというUSSECの子会社です。SSAP発行時点までに、本プロトコルに準拠したマスバランス計算が適切に行われた大豆・大豆製品について、お客様のリクエストに基づき、出荷ごとに保証するシステム。輸出時に認証を発行します。



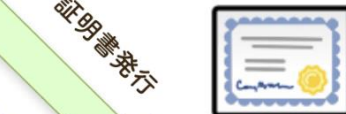
5. 証明書の検索ページで番号とコードを入力、証明書を確認・印刷



1. オンライン登録および認証発行をリクエスト



4. 証明書の検索に必要な番号・コードを知らせる



3. 証明書発行



2. オンライン登録\*



# MAFF aims to ensure food security with its strategy.

## みどりの食料システム戦略（概要）

～食料・農林水産業の生産力向上と持続性の両立をイノベーションで実現～

Measures for achievement of Decarbonization and Resilience with Innovation (MeaDRI)

令和3年5月  
農林水産省

### 現状と今後の課題

- 生産者の減少・高齢化、地域コミュニティの衰退
- 温暖化、大規模自然災害
- コロナを契機としたサプライチェーン混乱、内食拡大
- SDGsや環境への対応強化
- 国際ルールメイキングへの参画

#### 「Farm to Fork戦略」(20.5)

2030年までに化学農薬の使用及びリスクを50%減、有機農業を25%に拡大

#### 「農業イノベーションアジェンダ」(20.2)

2050年までに農業生産量40%増加と環境フットプリント半減

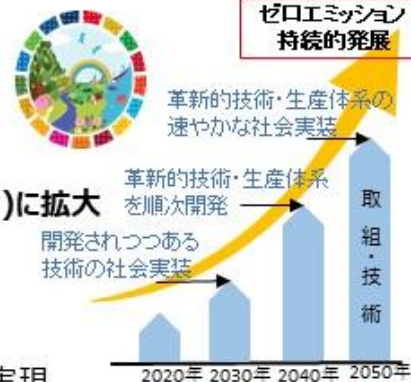
**農林水産業や地域の将来も見据えた持続可能な食料システムの構築が急務**

持続可能な食料システムの構築に向け、「みどりの食料システム戦略」を策定し、中長期的な観点から、調達、生産、加工・流通、消費の各段階の取組とカーボンニュートラル等の環境負荷軽減のイノベーションを推進

### 目指す姿と取組方向

#### 2050年までに目指す姿

- 農林水産業のCO2ゼロエミッション化の実現
- 低リスク農薬への転換、総合的な病害虫管理体系の確立・普及に加え、ネオニコチノイド系を含む従来の殺虫剤に代わる新規農薬等の開発により化学農薬の使用量（リスク換算）を50%低減
- 輸入原料や化石燃料を原料とした化学肥料の使用量を30%低減
- 耕地面積に占める有機農業の取組面積の割合を25%(100万ha)に拡大
- 2030年までに食品製造業の労働生産性を最低3割向上
- 2030年までに食品企業における持続可能性に配慮した輸入原材料調達の実現を目指す
- エリートツリー等を林業用苗木の9割以上に拡大
- ニホンウナギ、クロマグロ等の養殖において人工種苗比率100%を実現



#### 戦略的な取組方向

2040年までに革新的な技術・生産体系を順次開発（技術開発目標）

2050年までに革新的な技術・生産体系の開発を踏まえ、

今後、「政策手法のグリーン化」を推進し、その社会実装を実現（社会実装目標）

※政策手法のグリーン化：2030年までに施策の支援対象を持続可能な食料・農林水産業を行う者に集中。

2040年までに技術開発の状況を踏まえつつ、補助事業についてカーボンニュートラルに対応することを目指す。

補助金拡充、環境負荷軽減メニューの充実とセットでクロスコンプライアンス要件を充実。

※革新的技術・生産体系の社会実装や、持続可能な取組を後押しする観点から、その時点において必要な規制を見直し。地産地消型エネルギーシステムの構築に向けて必要な規制を見直し。

### 期待される効果

#### 経済 持続的な産業基盤の構築

- ・輸入から国内生産への転換（肥料・飼料・原料調達）
- ・国産品の評価向上による輸出拡大
- ・新技術を活かした多様な働き方、生産者のすそ野の拡大

#### 社会 国民の豊かな食生活 地域の雇用・所得増大

- ・生産者・消費者が連携した健康的な日本型食生活
- ・地域資源を活かした地域経済循環
- ・多様な人々が共生する地域社会

#### 環境 将来にわたり安心して暮らせる地球環境の継承

- ・環境と調和した食料・農林水産業
- ・化石燃料からの切替によるカーボンニュートラルへの貢献
- ・化学農薬・化学肥料の抑制によるコスト低減

アジアモンスーン地域の持続的な食料システムのモデルとして打ち出し、国際ルールメイキングに参画（国連食料システムサミット（2021年9月）など）

# Aiming to achieve this with certified products.

## 食品産業

2030年までに食品企業における持続可能性に配慮した輸入原材料調達の実現を目指す。

### 2030年目標の設定の考え方

- 世界的なSDGsの取組が加速し、輸入原材料に係る持続可能な国際認証等が欧米の食品企業を中心に拡大する中で、2030年は、全ての主要な国内企業が2030年までに持続可能性に配慮した何らかの対応を行うことを目指すという考え方で目標を設定。
- 2030年までは、例えば、食品企業が原材料調達に当たって、川上の環境・人権への配慮を確認し、認証品を取得することで、目標達成を目指す。

### ① 持続可能な輸入食料・輸入原材料への切替えや環境活動の促進

- ・持続可能性に懸念のある輸入原材料の調達や環境活動に関する現状把握
- ・官民一体となって持続可能性に配慮された輸入原材料の調達先の確保・切替えを推進
- ・国際的な動向を踏まえた環境配慮経営の推進による ESG 投資等の引き込み
- ・持続可能性の向上や環境保全に関する ESG 投資等の促進
- ・環境貢献企業に対する表彰
- ・気候関連財務情報開示タスクフォース (TCFD) 提言に基づく気候関連リスクの情報開示の推進



