DIASCA

Digital Integration of Agricultural Supply Chains Alliance

2nd Round Table Meeting

31 Jan 23, 3-6 pm CET

Agenda

Time (CET)	Topic	Presenter / Host
3:00pm	**Official Welcome**	Silke Klöver, BMZ Andrea Burkhardt, INA / GIZ *Moderator: Leonhard Nima*
3:20pm	**Setting the Scene**	
	The new EU Deforestation Regulation - Implications for Traceability	Emanuele Pitto, European Commission, DG Environment
	Global perspectives – Spotlight on National Traceability Initiatives	Daniel Mbithi, Nairobi Coffee Exchange Michael Ekow Amoah, COCOBOD Ghana
4:00pm	**Energy Break**	
4:10pm	**Status Quo & Progress Update DIASCA**	Andreas Füßler, Niklas Kuhnert, GS1 Daniele Giovanucci, Liam Brody, COSA
4:45pm	**Interactive Working Groups - Worldcafé**	
	Group 1: Traceability	Niklas Kuhnert, GS1
	Group 2: Forest Monitoring	Liam Brody, COSA
	Group 3: Farmer Livelihoods & Income	Daniele Giovanucci, COSA
5:45pm	**Summary & Outlook**	Andreas Füßler, Niklas Kuhnert, GS1 Daniele Giovanucci, COSA Lars Kahnert, INA / GIZ
6:00pm	**Closing & Networking**	

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Welcome by BMZ

Silke Klöver

Division 122 "Sustainable Agricultural Supply Chains, International Agricultural Policy, Agriculture, Rural Development, Innovation“ German Federal Ministry for Economic Cooperation and Development (BMZ)

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Welcome by GIZ / INA

Andrea Burkhardt

Head of Digitalisation Component, Initiative for Sustainable Agricultural Supply Chains (INA), GIZ

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The new EU Deforestation Regulation – Implications for Traceability

Emanuele Pitto

International Relations Officer, European Commission, Directorate-General for Environment, F1 - Planetary Common Goods, Universal Values And Environmental Security

Regulation on deforestation- and forest degradation free supply chains

European Commission
DG Environment

Context

- **420 million hectares** of forest worldwide – **an area larger than the EU** – have been lost between 1990 and 2020 (FAO).
- A **significant share of that forest loss is legal** (Forest Trends.)
- Deforestation and forest degradation are important drivers of **climate change** (IPCC: 11% of GHG emissions) **and biodiversity loss**
- 90% of deforestation is provoked by the **expansion of agricultural land** (FAO), which is linked in particular to a series of commodities.
- The **EU is a major consumer of commodities** associated with deforestation and forest degradation.

Objectives of the Regulation

GENERAL

Minimise the EU's contribution to deforestation and forest degradation worldwide
(thus reducing global deforestation and forest degradation
as well as greenhouse gas emissions and biodiversity loss)

Specific

Minimise risk that products from supply chains associated with deforestation / forest degradation are placed on the EU market or exported from it

Increase EU demand for and trade in legal and 'deforestation free' commodities and products

Legislative and implementation track

- **November 2021:** Commission proposal
- **December 2022:** Preliminary political agreement between EP and Council
- **May-June 2023 (tentative)**: Entry into force
- **December 2024 (tentative)**: Entry into application of obligations for operators (June 2025 for small enterprises)

Main elements [1]

- **Mandatory due diligence** rules for all operators that place the relevant products on the EU market or export them from the EU
  - Only products that are both **deforestation-free and legal** would be allowed on or exported from the EU market – need to be covered by **a due diligence statement**
  - Based on **internationally-backed definitions** (FAO)
  - Main obligations applicable to **operators and non-SME traders**
  - **Strict traceability** linking the commodity to the plot of land where it was produced
  - **Legality**: Products will need to be legal according to the laws of country of production, including applicable human and labour rights and free, prior and informed consent

Main elements [2]

- **Commodities selected:** Palm oil, soy, wood, cattle, cocoa, coffee, rubber and some derived products (e.g. chocolate, furniture, tyres, printed products)
- **Non-discrimination**: The Regulation applies both to domestically produced and imported commodities and derived products
- **Progressive scope** - Initially covering selected commodities and derived products; to be updated regularly
- **'Cut-off date' of 31 December 2020**: Aligned with UNSDG 15.2, aims to minimise disruption for smallholders and facilitate satellite monitoring

Main elements [3]

- **Benchmarking system** that will assign risk to countries or regions according to risk of deforestation – standard (by default), low and high
- **Specific obligations for operators –** simplified due diligence for low-risk (still required to collect information, but not assess and mitigate risks)
- **Minimum level of inspections** for Member States authorities to perform (9%, 3% and 1%, depending on the level of risk)
- **Review:** Other wooded land (one year); other ecosystems, commodities, products and financial institutions (two years); others (five years)

Focus on traceability

- Operators to provide the **geolocation** of all plots of land where the product(s) were produced

- Definition of **geolocation:**

> ***means "the geographical location of a plot of land described by means of latitude and longitude coordinates corresponding to at least one latitude and longitude point and using at least six decimal digits. For relevant commodities other than cattle, for plots of land of more than 4 hectares, the geographical location shall be provided using polygons, meaning sufficient latitude and longitude points to describe the perimeter of each plot of land."***

Main elements [4]

Cooperation with partner countries:

- The Regulation is part of a broader set of policies laid out in the 2019 Communication on Stepping up EU Action to Protect and Restore the World's Forests
- Imports of the commodities and products covered - **EUR 85 billion** / **year**
- N**o ban** against any country or commodity
- The Commission will **step up cooperation** to ensure that EU partners are able to reap the benefits of new EU rules on deforestation
- The Commission will also intensify engagement with **consumer countries** such as China and USA as well as in international fora

Implementation tasks

- **Information System**: IT developments, Implementing Acts, up and running by the entry into application
- **Benchmarking:** Implementing act, running by the entry into application
- **Guidelines**: For operators and traders, for competent authorities, on certain definitions
- **Review**: Impact assessment and legislative proposal (when needed)
  - First review: Other wooded land (one year after entry into force, before entry into application)
  - Second review: Commodities, products, other ecosystems, financial institutions (two years after entry into force)
  - Third review: Smallholders, trade facilitation tools, degradation, circumvention, etc. (five years after entry into force)

Key takeaways

- The Regulation will have an impact on suppliers whether in the EU or abroad
- All relevant players need to get ready for **application by the end of 2024** – the fastest to adapt will enjoy a competitive advantage
- EU is ready to work closely with and support the partner countries' efforts to promote the transition to sustainable agricultural production, sustainable forest management and the development of transparent and sustainable supply chains.
- The Regulation is based on the following **principles**:
  - Transparency, accountability and sound scientific and methodological basis
  - Consistency with agreed **international commitments**, notably halting deforestation at the levels of December 2020 in line with SDG 15
  - **Non-discrimination**, as it equally treats domestic and imported commodities and products and covers both imports and exports.

Thank you!

Learn more here:
https://ec.europa.eu/environment/publications/proposal-regulation-deforestation-free-products_en
https://data.consilium.europa.eu/doc/document/ST-16298-2022-INIT/en/pdf

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Global perspectives – Spotlight on National Traceability Initiatives

Daniel Mbithi
Chief Executive Officer, Nairobi Coffee Exchange

Michael Ekow Amoah
Deputy Director R&D, COCOBOD Ghana

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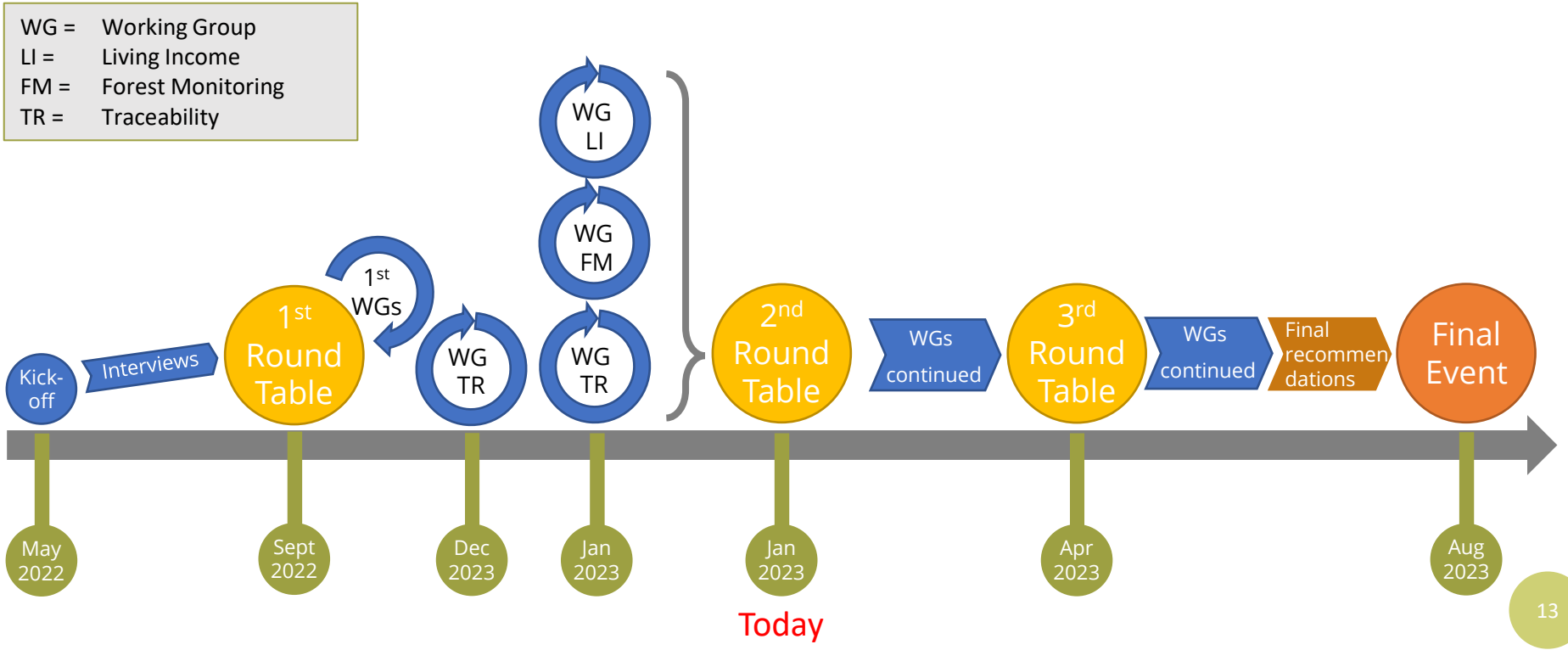
Status Quo & Progress Update DIASCA

Andreas Füßler
GS1 Germany
Niklas Kuhnert
GS1 Germany
Matthew Himmel
COSA
Liam Brody
COSA

Status Quo & Progress Update
- Timeline -



Status Quo & Progress Update

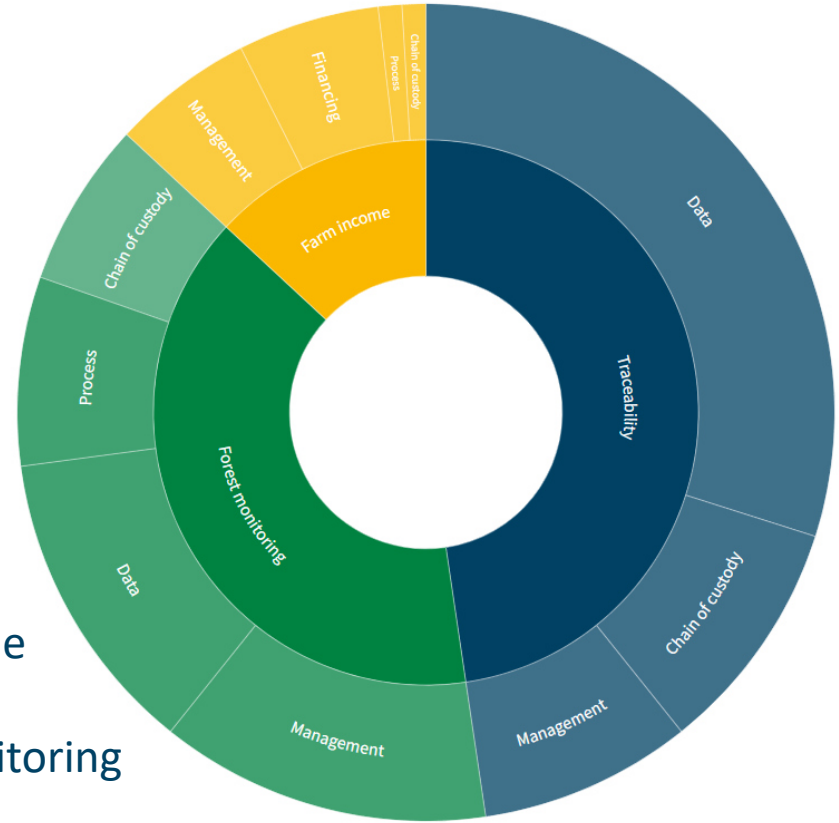
Standards Conformity

Research

Traceability

Farm Income

Forest Monitoring



INA Initiative für nachhaltige Agrarlieferketten

Interoperability for Traceability Systems

Digital Integration of Agricultural Supply Chains Alliance (DIASCA)

DIASCA
Digital Integration of Agricultural Supply Chains Alliance

The Collected Traceability Requirements

- Working Group 1 (Round Table 2022-09-07)
- Working Group 2 (2022-11-30)
- Working Group 3 (2023-01-16)

Traceability – WG 1 (Requested Characteristics)

- Identify and agree **on global traceability attributes and data formats** for **established identification keys, common auto ID and information sharing**. For interoperability reasons in multi-tier value networks **one should build on existing standards**.

- Start small in tracing complete supply chains to proof functionalities and **improve trust**. To achieve a relevant data amount and a substantial trust in data, the experts proposed a **secure storage of data** and their responsible dissemination by public or private services (e. g. **trustee service**, shared enterprise).

- A **commitment of companies for data sharing** is crucial which depends strongly on **the benefits of conducting traceability for all stakeholders** in a general **trustworthy framework.**

Traceability – WG 2 (Required Elements)

What needs to be identified:

- Actors
- Items
- Products
- Transport items

What basic Information do we need for traceability:

- The timestamp
- The location
- The Item / Product
- The Process Step

Traceability – WG 3 (Proposal+Discussion)

Proposal and Discussion on:

- Identification
  - Location
  - Products
  - Transport units
- Data Exchange

Global Language of Business for Seamless Communication

Identify: Standards for Identification

Vocabulary - worldwide unique

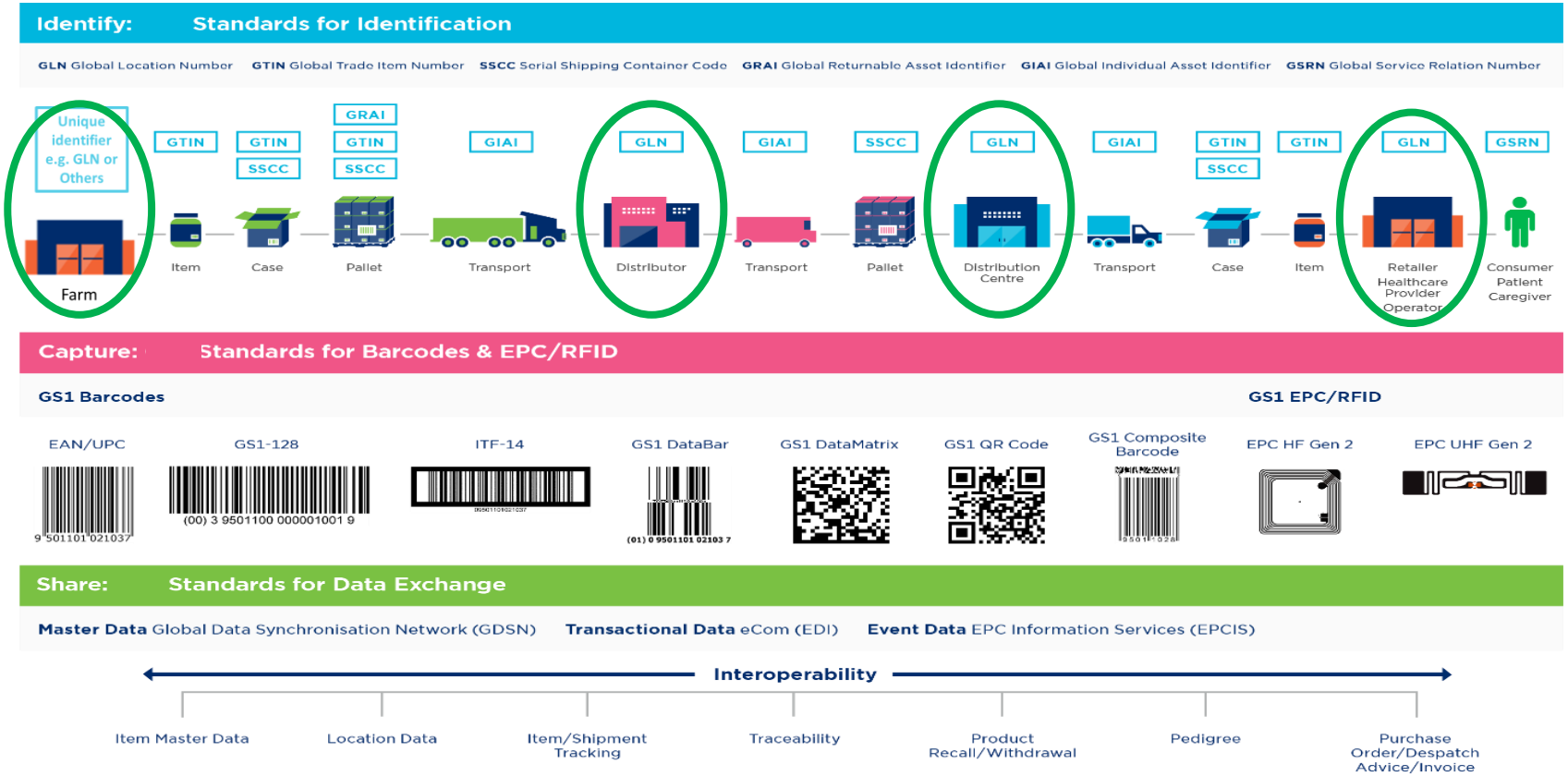
Capture: Standards for Barcodes & EPC/RFID

Font - commonly known

Share: Standards for Data Exchange

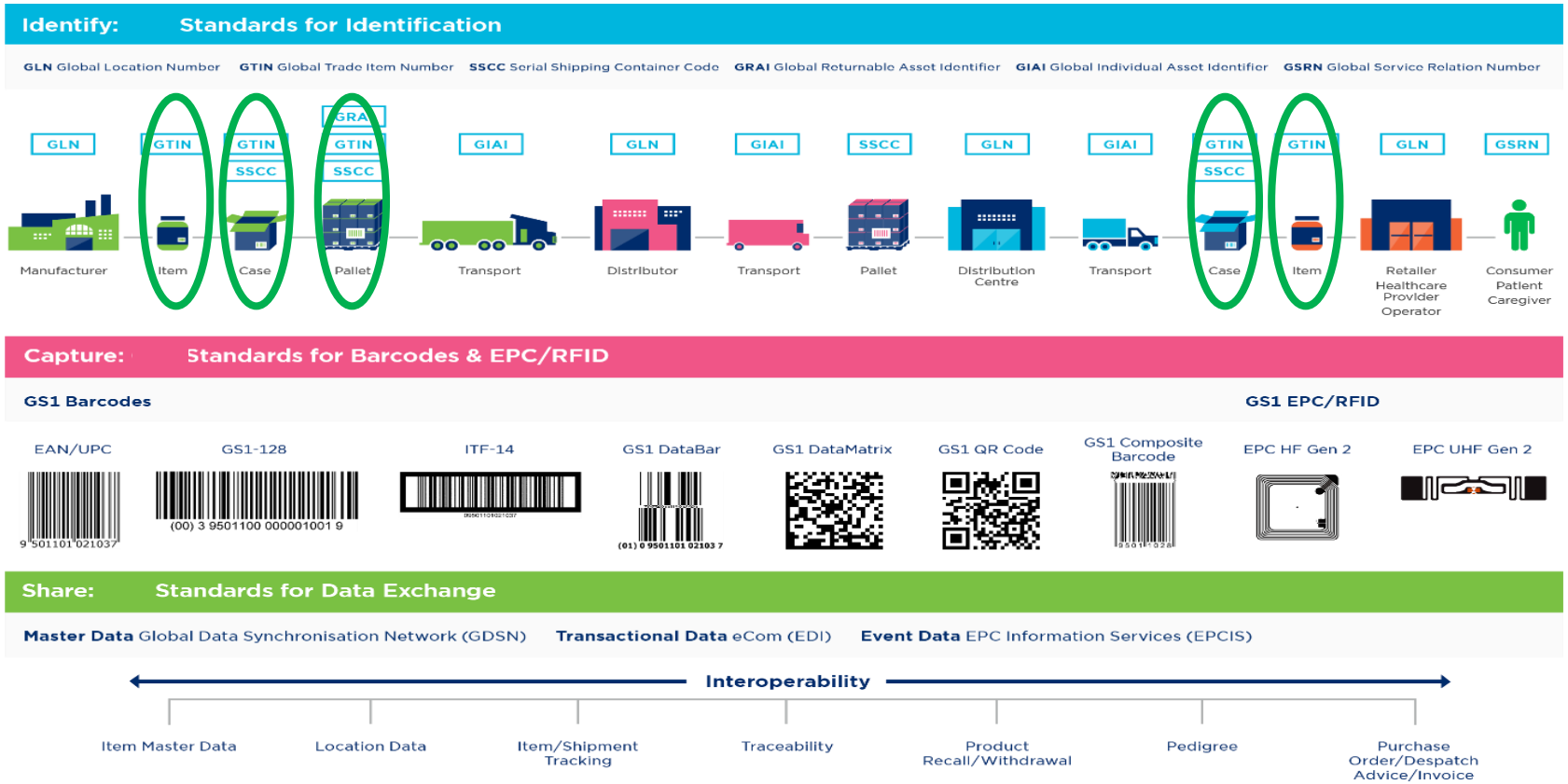
Grammar - valid across systems

Identification: GLN (Global Location Number) and Others



Identification of the Location

Identification: GTIN (Global Trade Item Number)



Global Trade Item Number (GTIN)

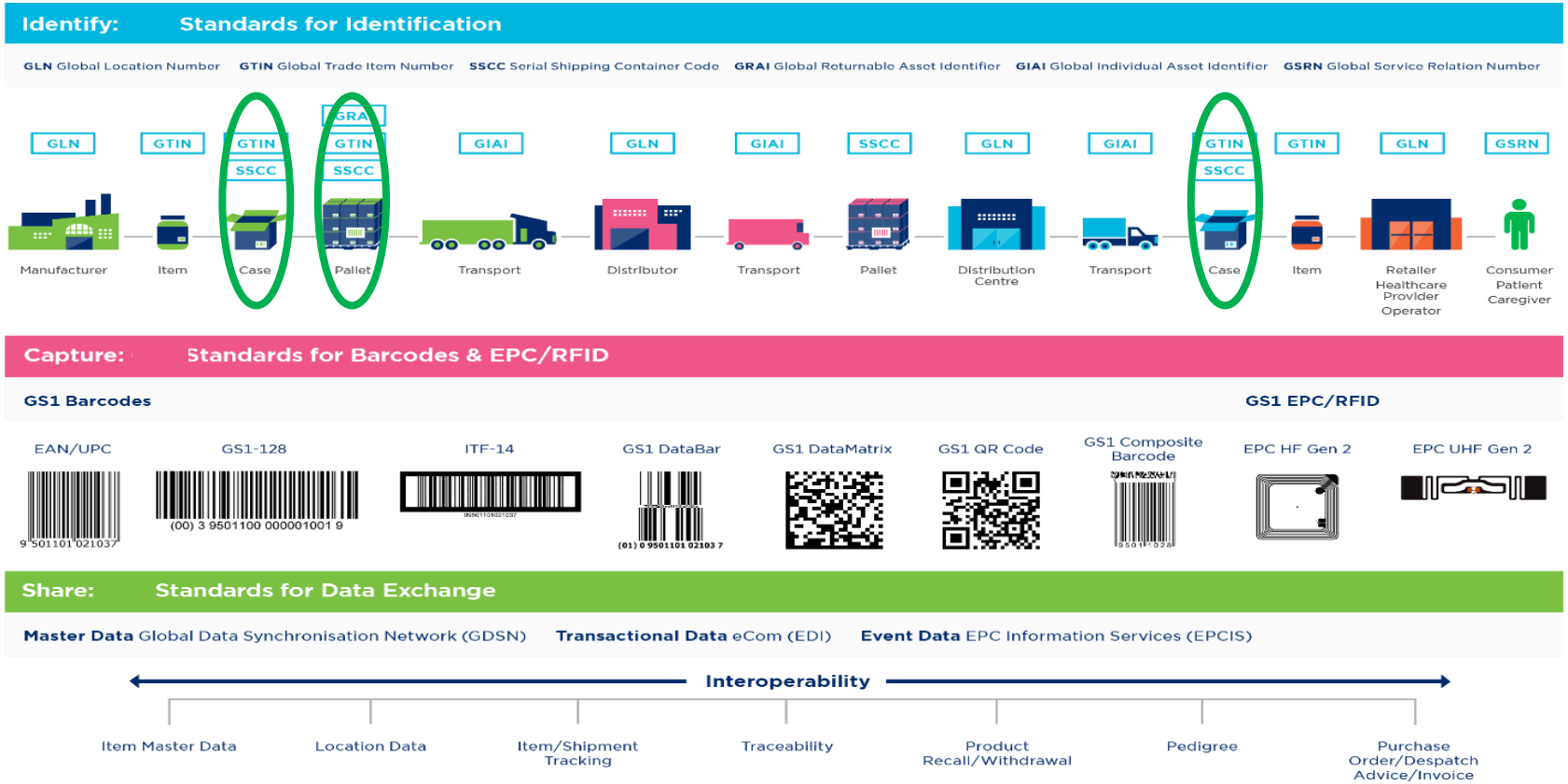
How to use GTINs

Global Trade Item Numbers (GTINs) **uniquely identify products**.
This information is embedded **into a barcode, which can also hold extended product data, such as batch/lot number**, enabling you to identify **products**, **cases** and **pallets** wherever they are in the supply chain.

Benefits

Standards optimise business processes, **form brand loyalty** and build the **foundation for an efficient supply chain**.
The ability to **uniquely identify products, cases and pallets globally** also enables accurate and precise recalls, should they occur.

Identification: SSCC (Serial Shipping Container Code)



Serial Shipping Container Code (SSCC)

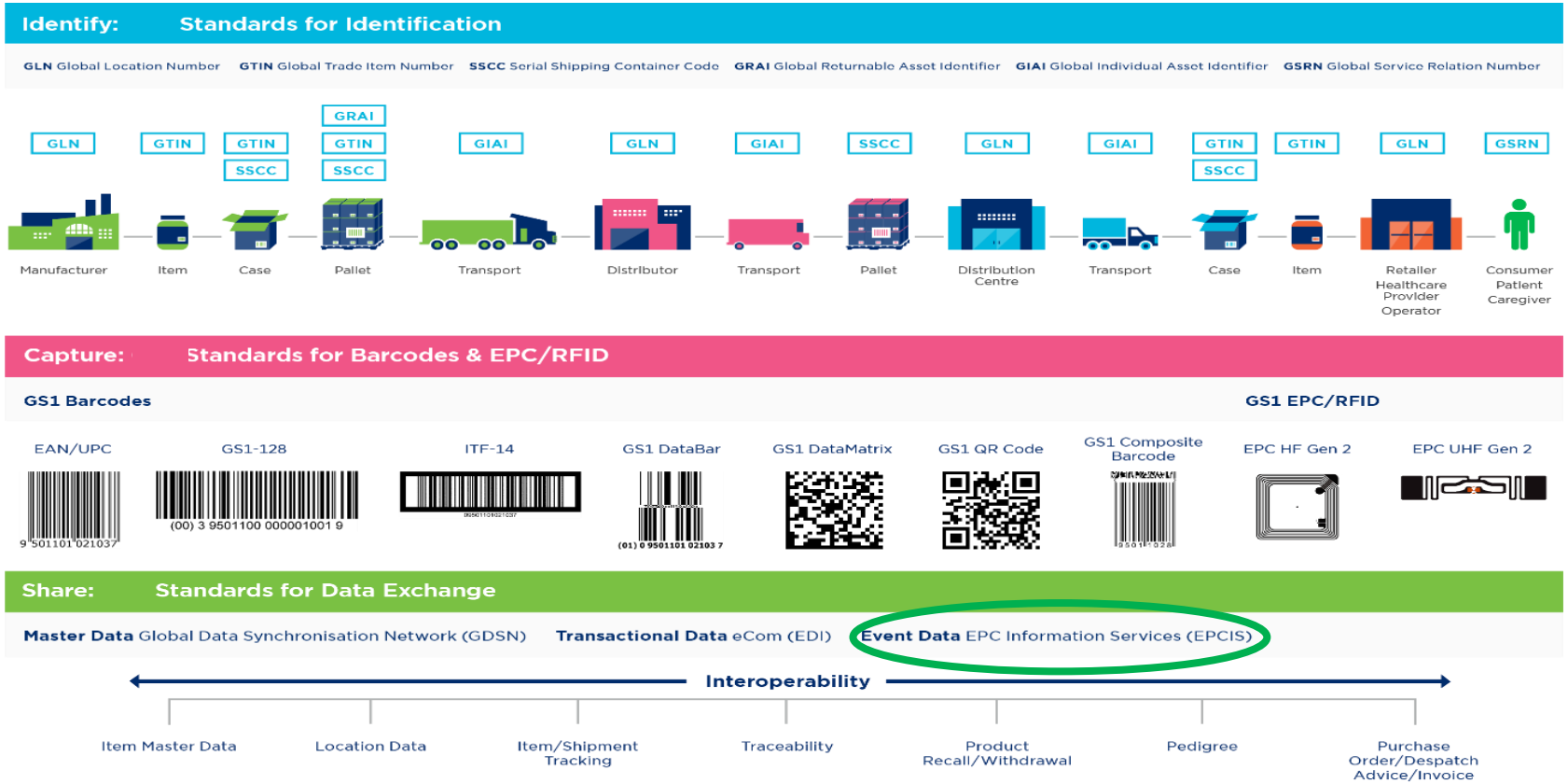
How to use SSCCs

Global Trade Item Numbers (GTINs) and Serial Shipping Container Codes (SSCCs) are used to **identify pallets** and enable **tracking of shipments**. SSCCs are **encoded into bar codes or EPC/RFID tags**.

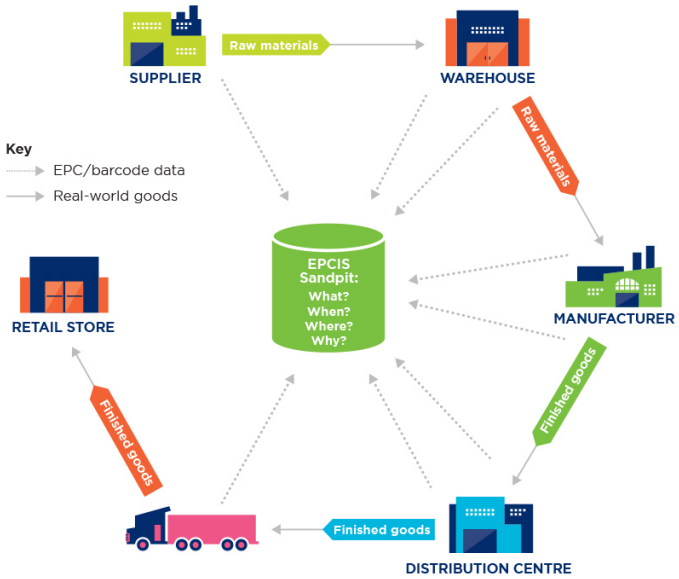
Benefits

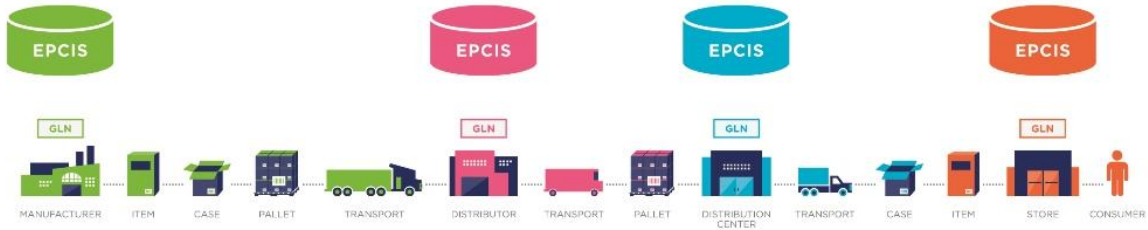
Standards **improve visibility** in **product movement** and will help **verify the flow of goods** – both inbound and outbound.

Share: EPCIS (Electronic Product Code Information Services)

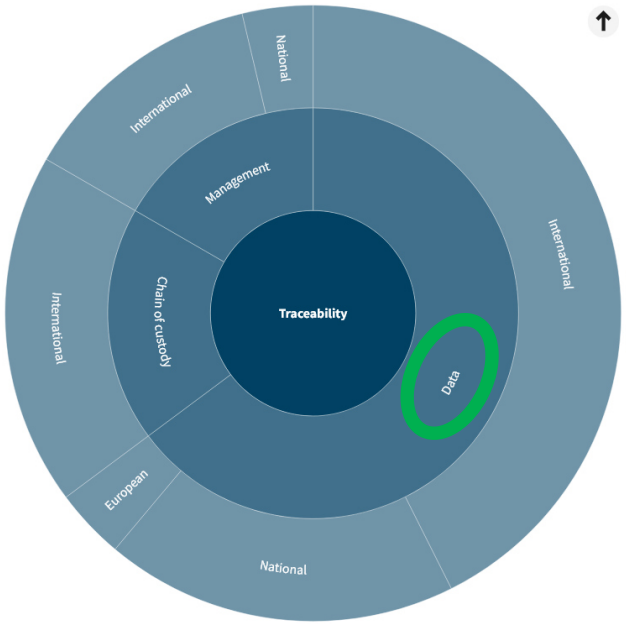


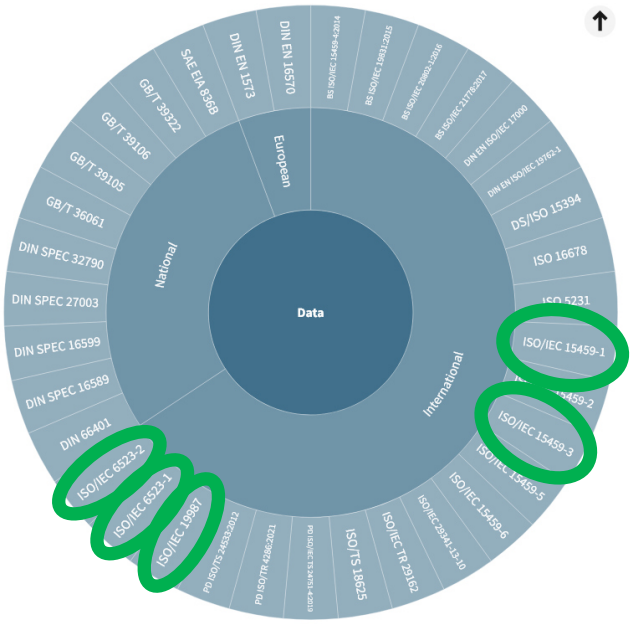
EPCIS (centralized / decentralized)





Standards in Traceability Landscape by DIN





https://public.flourish.studio/visualisation/12390549/

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Interoperability of Sustainability Data

A Blueprint for Better Supply Chain Data

The definition

Data Interoperability is the set of requirements for data systems or software applications to access, accurately exchange, validate, and make use of similar or related information.

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Partnerships Benefit from Interoperability to Accelerate Impact

UN & Development Agencies

Scaling up globally to better reach the poor

UNFSS — A Platform of International Dialogue on Voluntary Sustainability Standards
IISD International Institute for Sustainable Development
IDB LAB
UNCTAD
FAO
UNEP
International Trade Centre
FORD FOUNDATION
IFAD International Fund for Agricultural Development
IFC International Finance Corporation

Governments

Improving public programs and policies

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation
CIHEAM International Center for Advanced Mediterranean Agronomic Studies
SAGARPA Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación
USDA
ICCRI Indonesian Coffee-Cocoa Research Institute
NAEB Rwanda
giz
inifap

Research Institutions

Ensuring science-based rigor

IITA Transforming African Agriculture
World Agroforestry Centre
CIAT
FAO
Massachusetts Institute of Technology
University of California
IFPRI International Food Policy Research Institute
William Davidson Institute at the University of Michigan
Bioversity International
CATIE Solutions for environment and development
Euricse European Research Institute on Cooperative and Social Enterprises

Companies

Facilitating more responsible sourcing practices

McDonald's
McCain
Nestlé Nespresso
Coca-Cola
Martin Bauer Group
Yogi
Mondelēz International
MARS
FARMER INCOME LAB
PEPSICO
KEURIG GREEN MOUNTAIN
The Sustainability Consortium
The J.M. Smucker Co
Global Coffee Platform
Lindt

Local Partnerships

Ensuring local relevance

ICED The International Centre for Evaluation and Development
Aldea Global
ISSER Knowledge for Development
GDI
CRECE Centro de Estudios Regionales Cafeteros y Empresariales
IEP Instituto de Estudios Peruanos
Federación Nacional de Cafeteros de Colombia

NGOs

Enhancing public good

Conservation International
iseal alliance
Hivos people unlimited
CRS Catholic Relief Services
Lutheran World Relief
Fairtrade
Rainforest Alliance

An interoperability standard

must facilitate diverse data and rationales without sacrificing clarity or key details.

Therefore, the standard must provide wide-reaching **categorization** and **taxonomy** while permitting auditable addenda to be attached to tracking events, entities, and data elements.

Focal Areas

DIASCA will initially focus on:

- **Farmer Livelihood & Income** (coordinated by COSA)
- **Forest Monitoring** (coordinated by COSA)
- **Traceability** (coordinated by GS1)

If you or your colleagues are interested in participating, let us know ASAP

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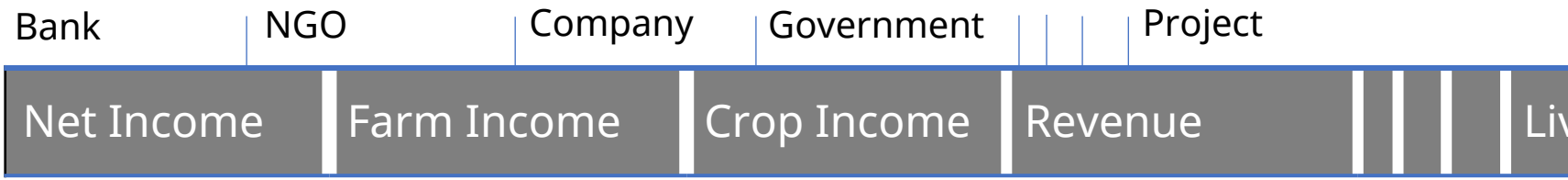
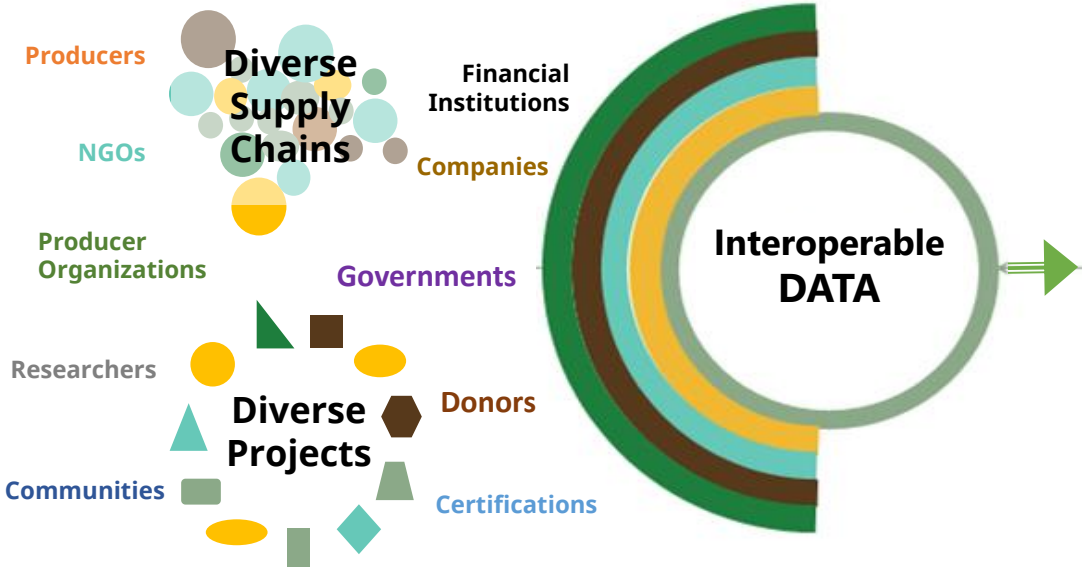
> “If you **gather**, **analyze**, and **structure** data about the same topics but in different ways, it is impossible to compare, learn, and improve”



Data Interoperability provides considerable value

Interoperability Benefits: From contradictory to coherent



1. **Reduced** reporting burden and costs
2. Rapid visibility into **performance** and **risks**
3. Learning & **benchmarking** fast
4. Enhanced **Responsible Sourcing** & collaboration
5. Data ecosystems enable **growth** & **innovations**

The 10 Step Process:

Building on tested principles
and the experience of a high-level
International Technical Advisory Panel

3 Domains of interoperability

1. Semantic

Definition of what is being measured with detailed taxonomy, meaning, and purpose of the indicators & metrics

2. Syntactic

Rules for how data is processed, arranged or coded, and reported

3. Structural

Format for how data is secured to be cross-functional and transmitted

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Aligned with International & Normative References

- ✓ CITES Convention
- ✓ Convention on Biological Diversity
- ✓ FAO Rome Declaration on World Food Security
- ✓ FAO GAP
- ✓ Global Compact - UN
- ✓ Global Forum on Responsible Business Conduct
- ✓ IFC Performance Standards on Environmental & Social Sustainability
- ✓ ILO Core 8 Conventions
- ✓ International Covenant on Economic, Social and Cultural Rights
- ✓ International Plant Protection Convention
- ✓ OECD Agri-Environmental Indicators
- ✓ OECD-FAO Guidance: Responsible Agricultural Supply Chains
- ✓ Ramsar Convention on Wetlands
- ✓ Rio Declarations
- ✓ Stockholm Convention on Persistent Organic Pollutants
- ✓ Sustainable Development Goals
- ✓ UN Guiding Principles on Business and Human Rights
- ✓ UN Framework Convention on Climate Change
- ✓ Universal Declaration of Human Rights
- ✓ Winnipeg Principles
- ✓ WHO Guidelines for Water Quality
- ✓ and others…

United Nations Framework Convention on Climate Change

UNITED NATIONS HUMAN RIGHTS

SUSTAINABLE DEVELOPMENT GOALS

OECD-FAO Guidance for Responsible Agricultural Supply Chains

The International Covenant on Economic, Social and Cultural Rights

GLOBAL FORUM ON RESPONSIBLE BUSINESS CONDUCT

International Labour Organization

COMMITTEE ON WORLD FOOD SECURITY

Convention on Biological Diversity

Stockholm Convention on persistent organic pollutants (POPs)

Food and Agriculture Organization of the United Nations

International Plant Protection Convention

iseal alliance

IFC

OECD

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International Technical Advisory Panel

Methods

- Targeting and sampling
- Data sources
- Demographic Identifiers DEI
- SMARTer Survey Creation
- Data collection methods and data types
- Validation approaches, rigor, quality
- Archetypes to segment and identify drivers
- Compliance vs. Sustainability Performance
- Comparability factors and Aggregation
- Governance, privacy, security

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Basic Indicator Description

& Technical Representation

DESCRIPTION FIELDS	Indicator Name	Women's Participation in Training
	Indicator ID/Code	Number X.X
	Element/ Theme	Social/ Gender
	Description	Women attending and completing trainings
	Data Subject	
	Metric	% of participants that complete trainings who are women
	Unit	Expressed as percent of total people attending
	Report Frequency or Timing	Annually, can be updated as needed
	Disaggregation & Segmentation	Data can disaggregate by regional or municipal level to reduce naming duplications and determine target or focal areas. Gender. Age, Education levels,
	Scientific Rationale	IFPRI, WEAI, US D.oL. FAO Gender Handbook. BMGF Gender
	Alignment to Goals or Reporting	SDG 8; 8.1; 8.24 GRI v. 4 Section
	Benchmarking	ILO Core Principles, WEAI, IWCA, Oxfam Gender Index
	Performance Standard	Value of 0.5 indicates that the gender gap is close to zero (gender equity)
	Limitations and Assumptions	Detail any limitations of the synthesized approach
CALCULATION FIELDS	Calculation: NUMERATOR	For each training conducted, the number of participants who are women
	Calculation: DENOMINATOR	For each training conducted, the total number of participants
	Data Source	Producer Database held by co-op, trader, exporter, or NGO: FarmGender (Gender of farmer) TrainingsAttended (Number of trainings attended)
	Validations	FarmGender: two options are valid-- "male" or "female" TrainingsAttended: a positive integer
	Subject of analysis	Supply chain, program/ project, PO or community level
	Exclusion / Inclusion Criteria	Includes: Farmers where frmGender is "FEMALE" Farmers where trainingsAttended is greater than 0

MPLE DING	women = 0
	totalFarmers = 0
	
	for farmer in farmers {
	if (farmer.frmGender = "FEMALE") then {
	if (farmer.trainingsAttended > 0) then women += 1	

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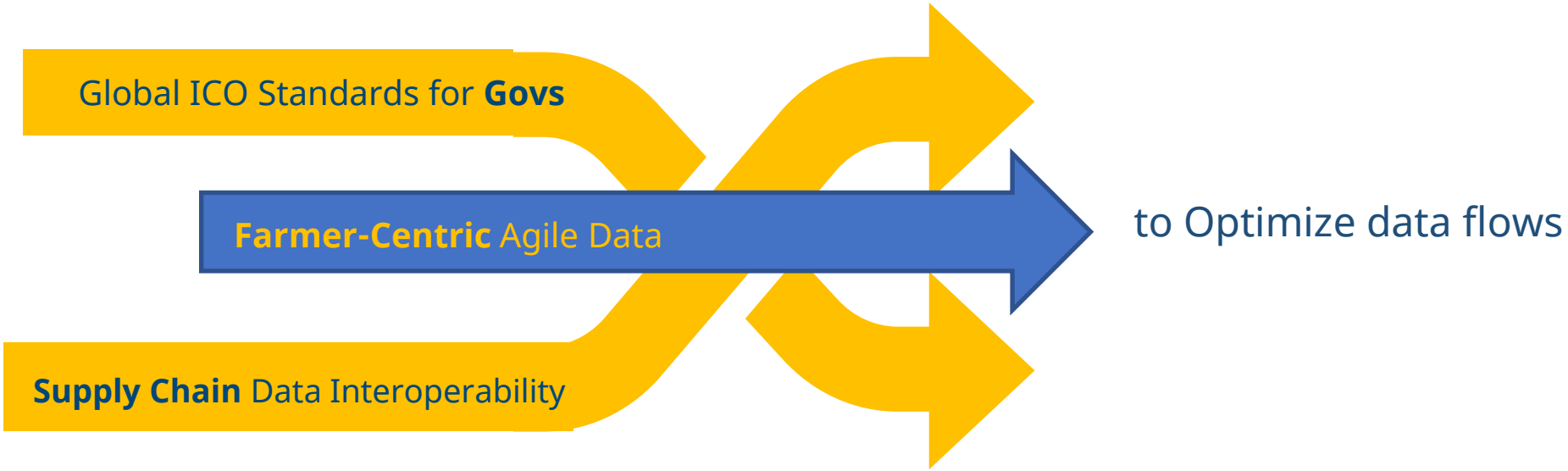
Solving from a **systemic** perspective = 3 elements



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Next Steps

Now: **Adding Data Scientists and Experts**

Mid-February: **Launch Reference Project Rwanda Collaboration**

First Mondays: **International Technical Advisory Panel**
0900 – 1030 ET / 1500-1630 CET

Submit to:
SC@ theCOSA.org

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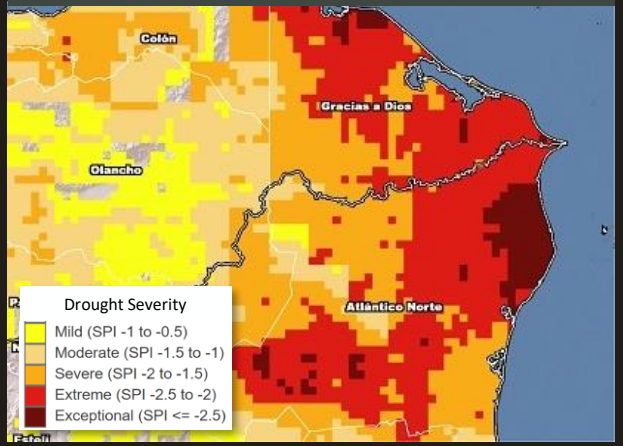
Interoperability of Geospatial Data

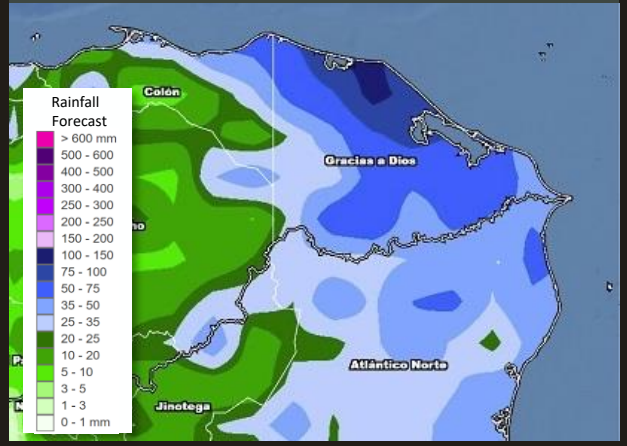
Deforestation as a Blueprint

What is Geospatial Data?

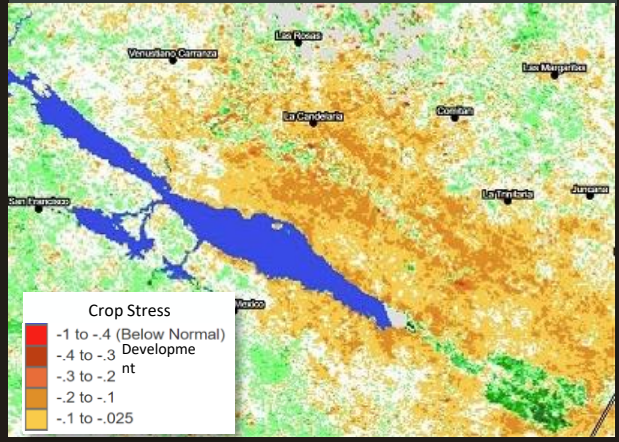
Early Warning Models



Tactical Weather Forecasts



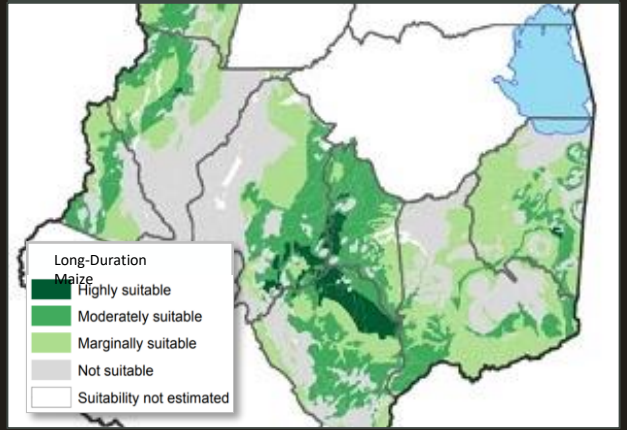
Weekly Crop Stress Models



Field-Level Crop ID

Crop Productivity Mapping

Crop Suitability Mapping



GEOSPATIAL DATA…

"…is information that describes **objects**, **events**, or other features with a **location** on or near the surface of the **earth**."

–IBM

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DIASCA Digital Integration of Agricultural Supply Chains Alliance

Our Objective

The objective of the DIASCA workstream on geospatial data is to establish an interoperable data standard for monitoring deforestation.

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Our Journey To Date

1st GLOBAL ROUNDTABLE
September 2022

Expert Interviews
September-December 2022

Geospatial Technical Advisory Panel Expert Survey
December 2023

Geospatial/Deforestation Income Technical Advisory Panel
January 2023

2nd GLOBAL ROUNDTABLE
Today - January 2023

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Progress We've Made

Semantic
October 2022 – February 2023

Syntactic
December 2022 – February 2023

Structural
Focus: February – May 2023

Adoption
Focus: March 2023 and beyond

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DIASCA Digital Integration of Agricultural Supply Chains Alliance

Next Steps

Submit to: LB@ theCOSA.org

Now, **Adding Data Scientists and Data Structuring Experts to TAP** – Reach Out!

Mid-February, **Launch Reference Project: Rwanda Collaboration (NAEB)**

Late February, **ITAP Monthly Meeting: Focus on Structure** (*doodle poll to follow*)

diasca@giz.de

http://diasca.org

Im Auftrag des:

Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung

Durchgeführt von:

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

INA Initiative für nachhaltige Agrarlieferketten

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