



DIASCA

Digital Integration of Agricultural
Supply Chains Alliance

Results of the second Round Table Meeting on 31st January 2023

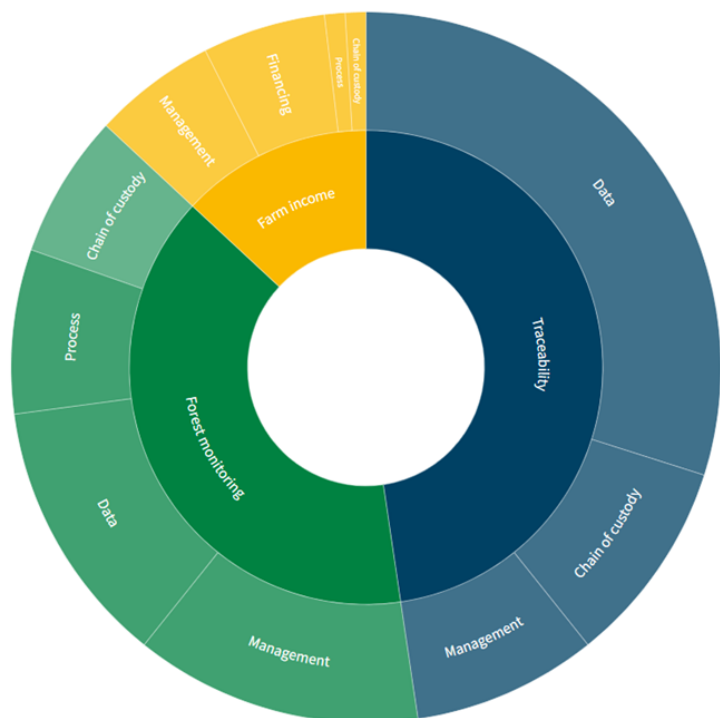
On **31st January 2023**, 137 supply chain actors, solution providers, researchers and other key stakeholders from around the world convened for the second time around the topic of **interoperability of digital traceability systems** and its importance in global agricultural supply chains. The ambitious goal of the “[Digital Integration of Agricultural Supply Chains Alliance](#)” ([DIASCA](#)) is a broad agreement on common data standards for **traceability, forest monitoring and farm income** by August 2023. This joint work will facilitate interoperability and data exchange between systems and enable an easier implementation and monitoring of due diligence legislations and related EU initiatives, such as the legislative proposal to ban products associated with deforestation from entering the EU market.

Please register [here](#) if you are interested in participating in DIASCA or in receiving updates.

Since the first round table meeting on Sept 7, 2022, working groups have been convened on the key topics **traceability, forest monitoring, and living income**. The second round table took place on 31st January 2023 with more than 100 international experts, in which the preliminary project progress, results and insights were shared, discussed and further elaborated. Please find the [slide decks](#) and [recording](#) on our website. See p. 5 for a breakdown of participants.

On 8 February, we hosted a DIASCA Webinar with our partner AgStack/Linux Foundation and CGIAR on **AgStack’s open-source geospatial registry**. Please find the slides of the presentation [here](#).

Interactive overview of existing standards by DIN/ISO. [Link](#)



An overview of existing standards, primarily on ISO (International Standards Organization) level, have been conducted by DIN (German Institute for Standardization, German chapter of ISO) and will feed into the three working groups. Results of this interactive standards landscape can be found [here](#).

Working Group Summaries

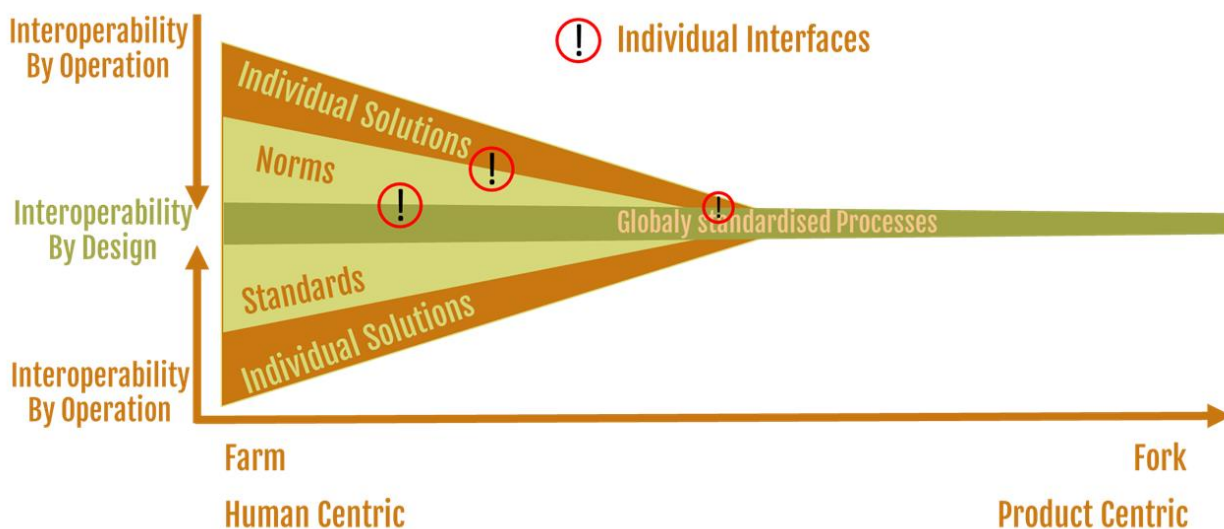
1. Traceability

Summary

Traceability along entire value networks is based on unique identification, capturing and sharing of data. With regards to identification, entities are classified in different levels like physical and digital locations, value network actors, products and their batches (or serial numbers), logistic units, transport units, reusable transport items. For cross-company use, these entities need worldwide unique identification keys. Regarding the data capture and a population of events with a common vocabulary along the supply chain, standardized auto ID solutions and a standard for identification keys and their attributes are available. This layer opens the way for standardized interfaces for data exchange between multiple IT systems among different stakeholders. The entities named above can be accompanied by crucial sustainability information. With regards to deforestation-free products this can be geolocations or data/certifications on due diligence.

Results

Further collection of the as-is situation regarding what traceability solutions are in place addresses the interoperability challenge: What are the upstream needs, so that processes lead into the globally standardised traceability stream?



One possibility is to try applying the downstream standards in the upstream processes as well. This is one of the proposals discussed in the DIASCA working group on traceability. However, further approaches might be possible, e.g. to use mapping methods to address interoperability. In this context, it is important to mention that any kind of mapping methods can only lead to interoperability by operation but not by design. Therefore, the working group will examine different scenarios in order to come up with a draft recommendation best addressing core requirements identified in the round table talks which are to:

1. 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.
2. Start small in tracing complete supply chains to test functionalities and improve trust. To achieve a relevant data amount and a substantial trust in data, experts proposed a secure storage of data and their responsible dissemination by public or private services (e. g. trustee service, shared enterprise).
3. A commitment of companies for data sharing is crucial which depends strongly on the benefits of traceability for all stakeholders in a general trusted framework.

2. Geospatial Data: Forest Monitoring

Summary

Geospatial data offers the ability to monitor and even predict key attributes, from deforestation to climate change, often at a fraction of the cost of gathering similar data on the ground. The number of geospatial data sources has proliferated. Yet leveraging the value of geospatial data to understand the context for a supply chain or group of suppliers, requires integration with entity-level and traceability data.

The objective of the geospatial working group is to begin to establish the fundamentals for interoperability between geospatial systems and the systems used to capture entity-level and traceability data.

The working group focuses on Forest Monitoring as a tangible use case for geospatial data. Forest monitoring is a topic of particular urgency and establishing standardization and interoperability is imperative ahead of upcoming regulatory changes in the EU, which will require all products being imported into the EU to be deforestation-free.

Results

1. Initial interoperability protocols on Geospatial Forest Monitoring drafted, developed by the working group. Focus has been on data semantics and syntax and will be further refined following feedback received during the 2nd global roundtable.
2. Commenced reference project with the National Agricultural Export Board of Rwanda (NAEB) to collect geolocation data associated with a national sample of coffee farmers—critical data required for compliance with new EU regulations. This project will help us understand the level of difficulty in securing *valid* GPS coordinates for smallholders and the system required for housing and analysis.

Recommendations

The Geospatial: Forest Monitoring session concluded with **six core recommendations**:

1. Align/integrate with other leading, but similar efforts such as the Forest Data Partnership.
2. Complete the working group's initial work on semantics and syntax.
3. Recruit more technical/data science experts to the working group to begin work on data structure and governance.
4. Have DIASCA facilitate national and/or industry-specific (coffee, cocoa, palm, etc) stakeholder engagement processes (i.e. industry or national mini DIASCAs).
5. Develop a guidance document or protocol for how value chain actors, especially farmers, can easily and freely access publically-available geospatial forest monitoring data.
6. Host a DIASCA-wide webinar on ACORN as an innovative model addressing the interplay of many of DIASCA's key focal points, from interoperable data systems, to measuring and

closing the income gap, to using geospatial forest monitoring, with fully traceable systems for carbon and coffee buyers/markets.

3. Entity-Level Data: Cost of Production - Farm Income

Summary

Individual entities, from farmers to brands and consumers, ultimately affect and are affected by sustainability efforts. Data affects many decisions and so data standards are vital to any shared accountability and those with interoperability will lower their costs and improve their understanding.

The working group will focus on entities further up the supply chain, where sustainability concerns, from human rights issues to deforestation and other environmental issues tend to be more severe. The entity-level data working group was initially set to focus on the topic of Farm Income. However, the group may elect to focus first on the relatively simpler Cost of Production given the overall objective of establishing interoperability that can then apply to any topic, including Farm Income.

Results

1. Initial interoperability protocols drafted Farmer Income & Livelihoods were developed by working group. Focus has been on data semantics and syntax and will be further refined following feedback received during the 2nd global roundtable.
2. Commenced Farmer Income & Livelihoods reference project with the National Agricultural Export Board of Rwanda (NAEB) to test the newly standardized cost of production data and living and prosperous income indicators.

Recommendations

1. Complete work on the curated set of indicators (semantics) and methodologies for measuring (syntax).
2. Complete the field research phase of the Farmer Income & Livelihoods reference project with the National Agricultural Export Board of Rwanda (NAEB) to test the newly standardized cost of production data and living and prosperous income indicators.
3. Use working group to determine how to best approach work on data structure, governance, and adoption.

Next Steps

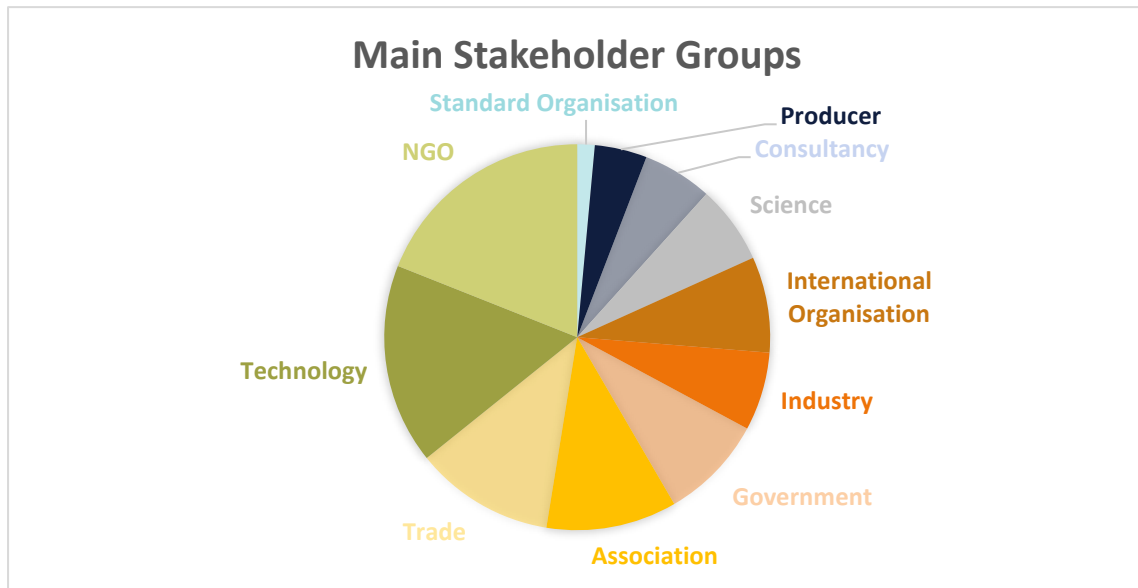
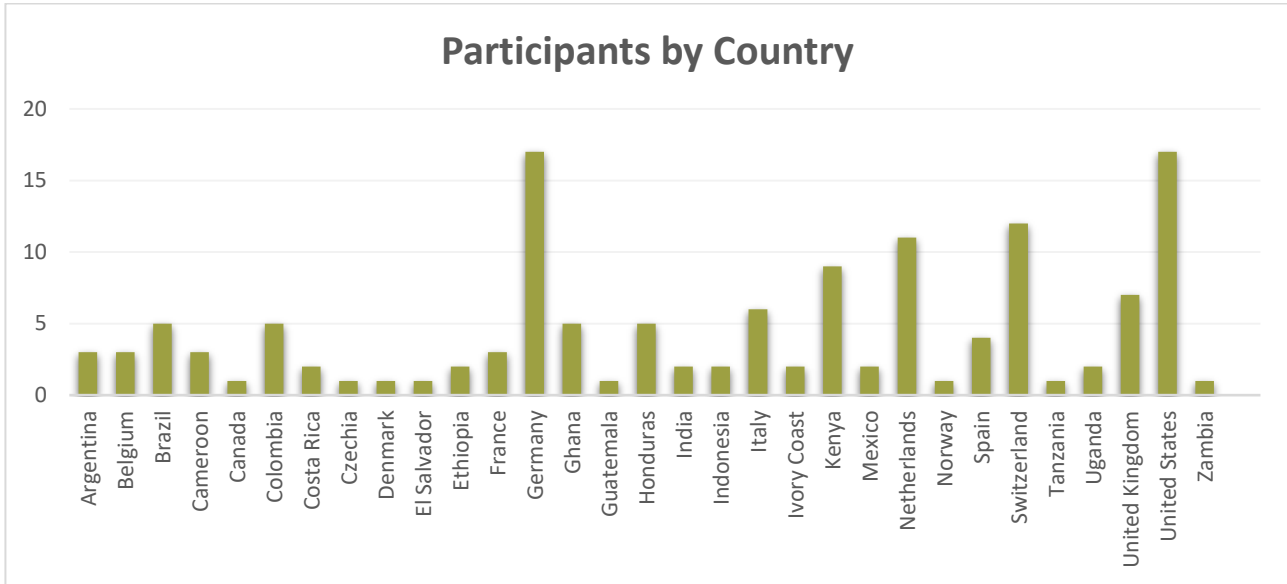
Apart from the continuation of the working groups, DIASCA within the next months will

- Strengthen the collaboration with national approaches to traceability and (geospatial) monitoring in producing countries, starting with Kenya.
- Continue the close alignment and collaboration with several complementary initiatives such as the [Forest Data Partnership](#) or the [JCO Public-Private Taskforce](#).
- Organize topic-related webinars to share insights and extend topical discussions with a wider audience.
- Start to link the working groups to join content with traceability.

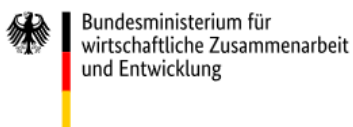
Check the [DIASCA website](#) and reach out to diasca@giz.de to link us up with contacts and initiatives, share information, questions or concerns. DIASCA is open, inclusive and pre-competitive!

Breakdown of participants

137 Participants from 31 different countries participated in the second DIASCA Round Table.



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