Implemented by:

SASI Sustainable Agricultural Supply Chains Initiative

LUNCHBREAK

Federal Ministry for Economic Cooperation and Development

4 April 2025, 12 – 1 pm

Sustainable Agriculture for Forest Ecosystems (SAFE)

&

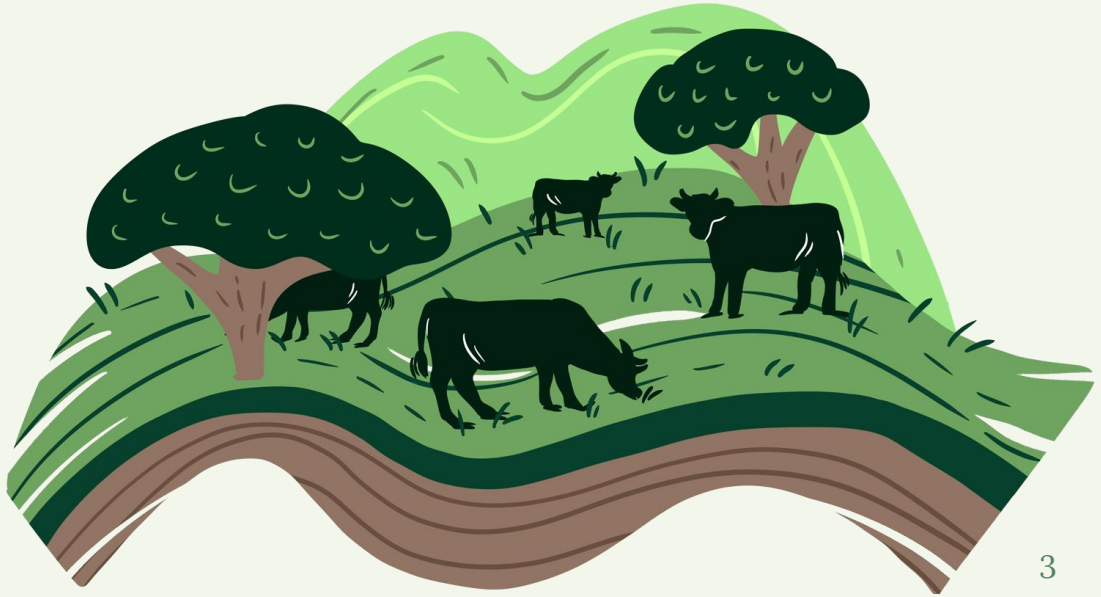
Digital Public Infrastructure

SASI Lunchbreak, April 4th 2025

SASI
Sustainable
Agricultural
Supply Chains
Initiative

SAFE in a nutshell

- **Objective:** Contribute to the conservation of forests and other ecosystems and to the sustainable management of agri-food systems
- **Duration**
  01.01.2022 – 31.03.2028
- **Partner Countries**
  Brazil, Burundi, Cameroon, DR Congo, Ecuador, Indonesia, Peru, Uganda, Vietnam, Zambia (plus additional activities in regional and global formats)
- **Value Chains**
  Cocoa, Coffee, Palm Oil, Soy, Beef, Natural Rubber, Wood



Implementation at a glance

Global Topics

Digital Public Infrastructure

Supporting shared digital systems and standards that enable society-wide functions and services

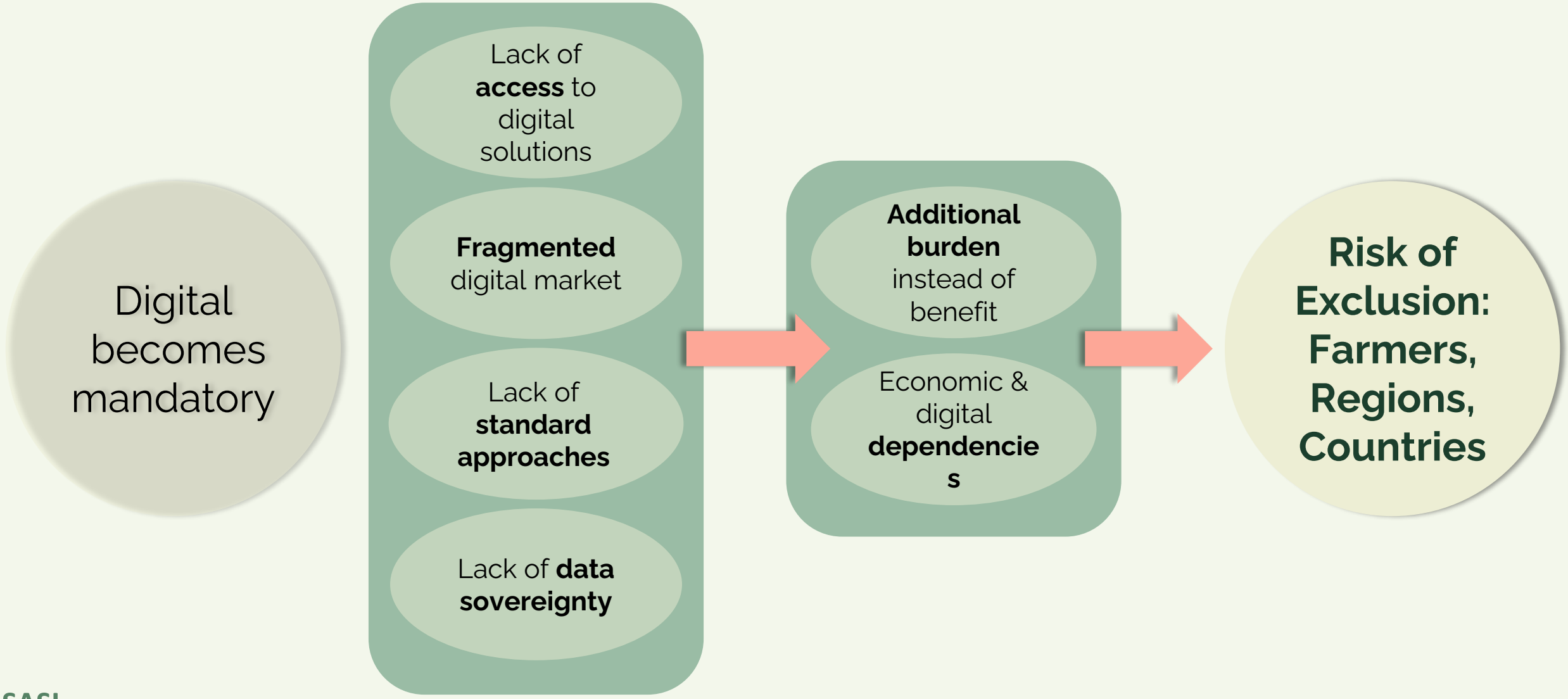
Gender Equity and Social Inclusion

Accelerate solutions for marginalized communities and Training of Trainers in selected partner countries

Green Financing

Mobilizing financial resources, particularly for vulnerable groups, and enhance gender-transformative financial frameworks to support sustainable investments

What drives us regarding digital approaches?



Towards DPI for Agriculture

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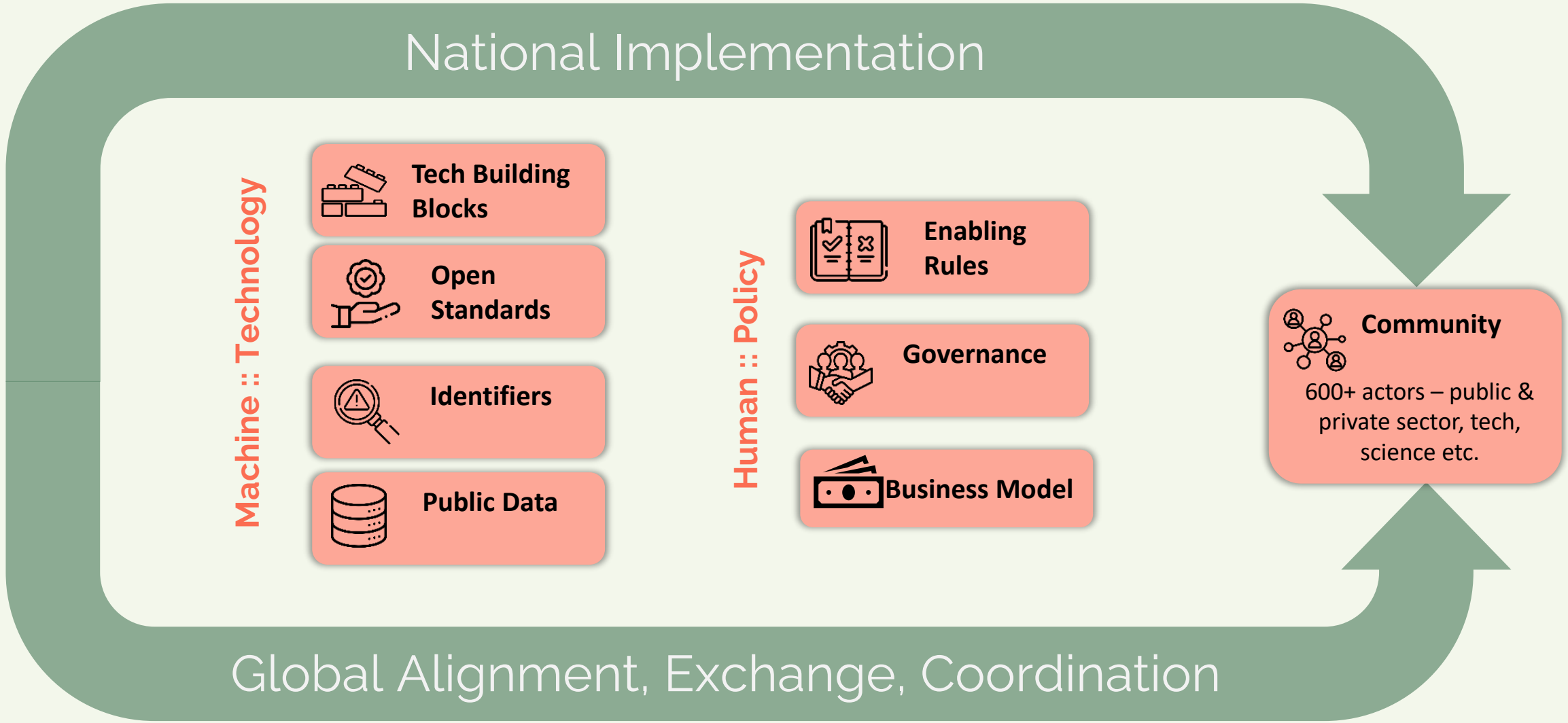
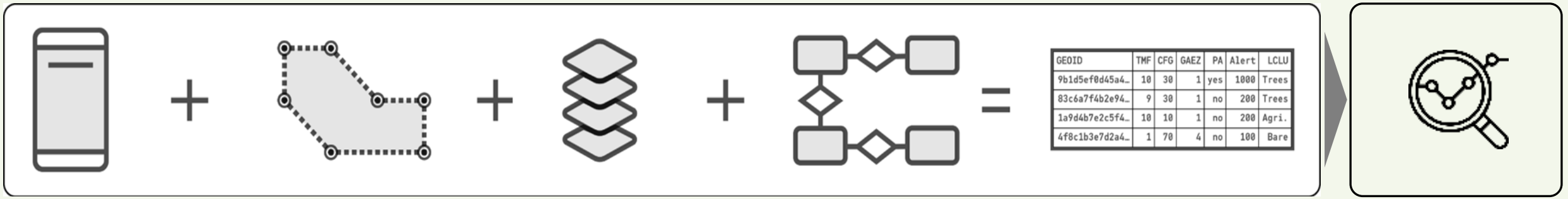


Building Blocks towards DPI



Boundaries
- Field data
- Manual / AI-based
- Segmentation

Unique Geo-IDs
- GDSP compliant
- Anonymous
- Attribute-less

Public geodata
- Land cover (change)
- Biophysical
- Land use

Public models
- AI models
- Decision trees

Compliance support
- Standardized data
- Risk assessment at plot level

Traceability
- interoperable

INA Sustainable Agricultural Supply Chain Initiative Trace

AgStack A Linux Foundation Project Asset Registry

Whisp

TraceFoodChain

openRAL

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Thank you!

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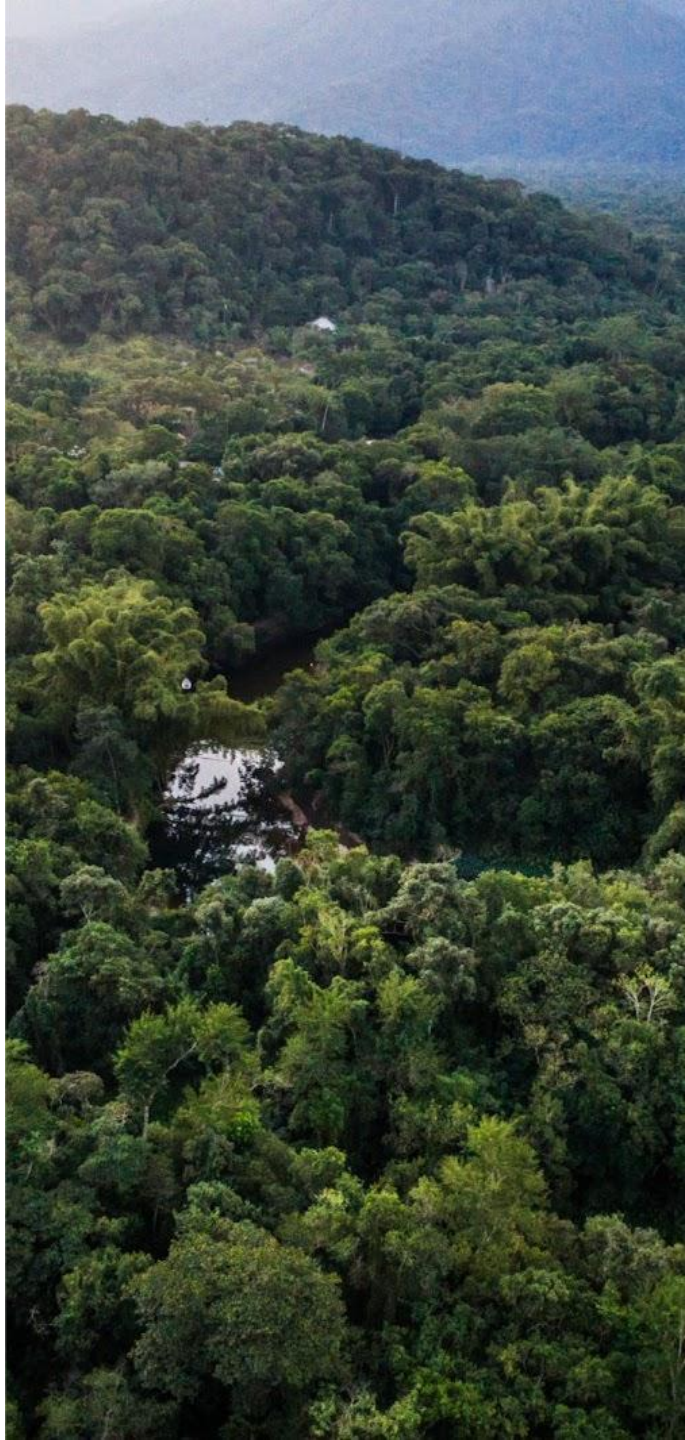
FOREST DATA Partnership

SASI Lunchbreak

April 4, 2025

FOREST DATA
Partnership

Unites organizations, governments and private sector partners around **trusted, transparent geospatial data solutions** that enable credible monitoring, verification and disclosure of progress in reducing deforestation.



What are the current challenges?

Geolocations and Traceability

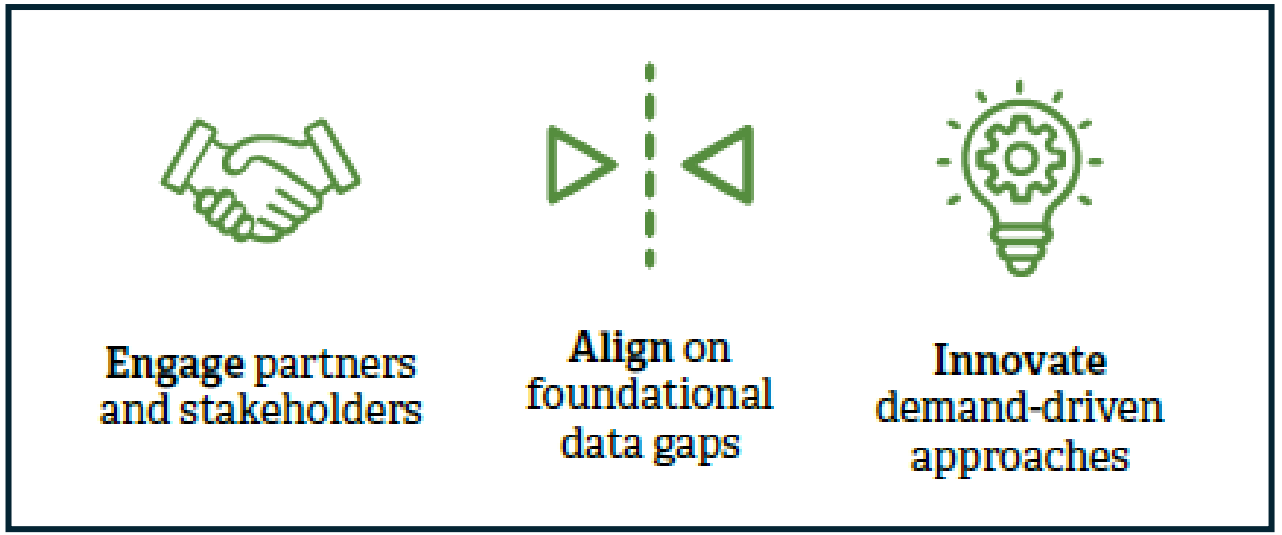
Forest & Land Monitoring

What does FDaP do?

Geolocations and Traceability

Forest & Land Monitoring

For each data challenge, we:

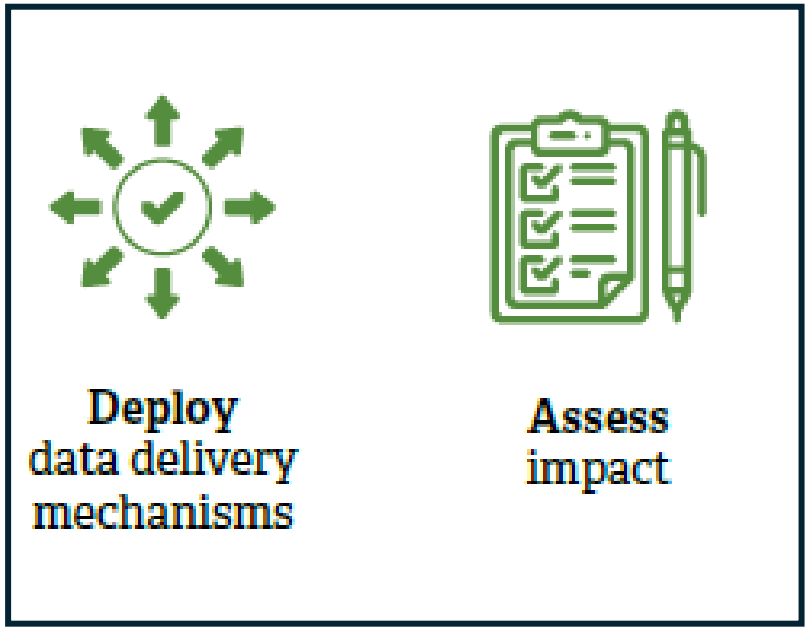


What does FDaP do?

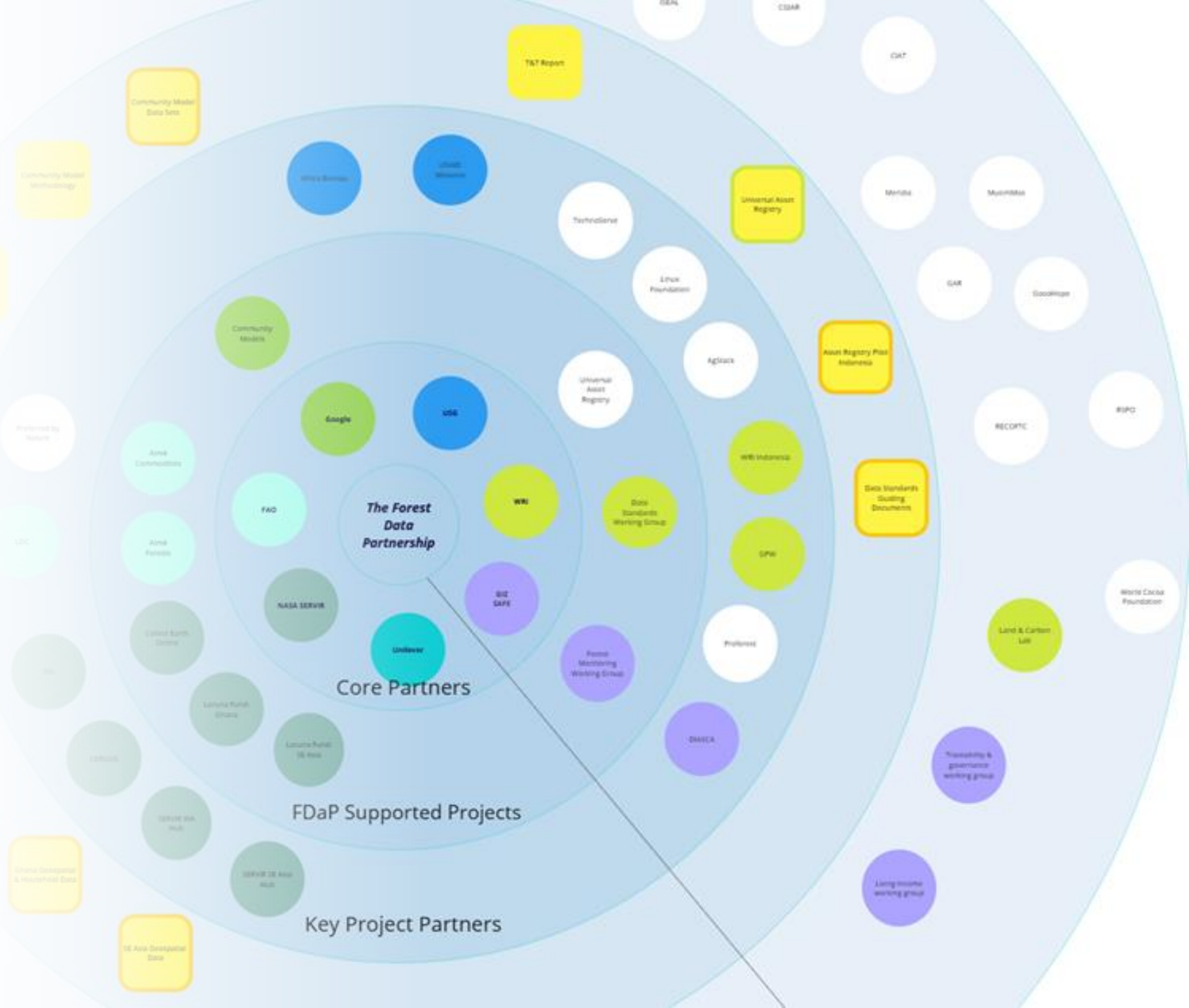
Data Solutions
(e.g., whisp, community models)

Non-data solutions
(e.g., reports, best practice guides)

For each innovative solution, we:



The Partnership



Forest Data Partnership: Phase Two

Focus on key pieces of work and innovations

Develop strategic partnerships

Support future collaboration and fundraising

Priority Workstreams

Data standards and Governance

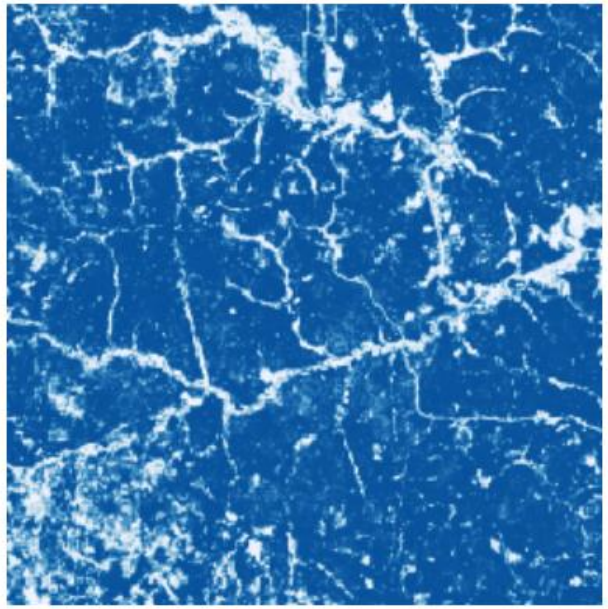
Convergence of Evidence

Digital Public Infrastructure

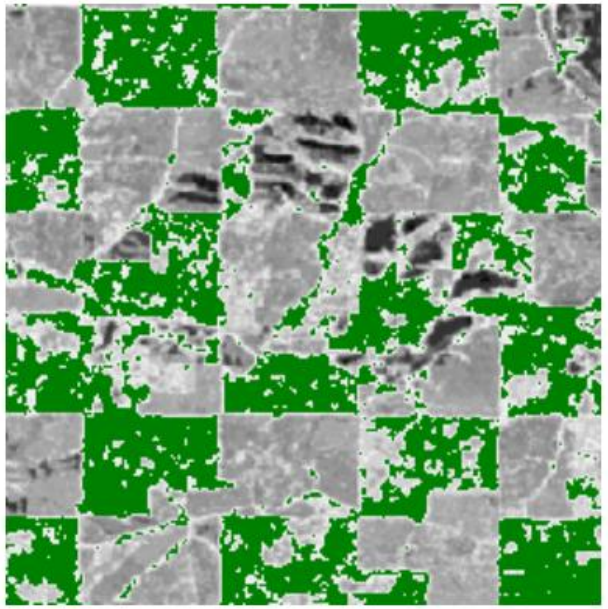
Community models of forest risk commodities

Community Learning Models

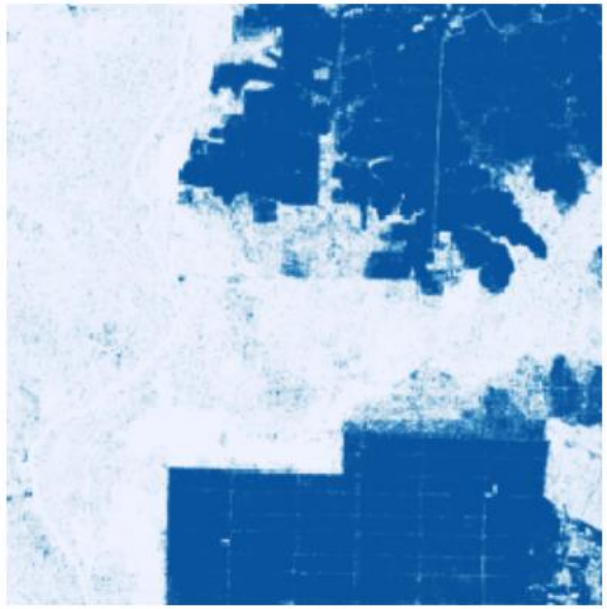
Cocoa Probability model 2024a



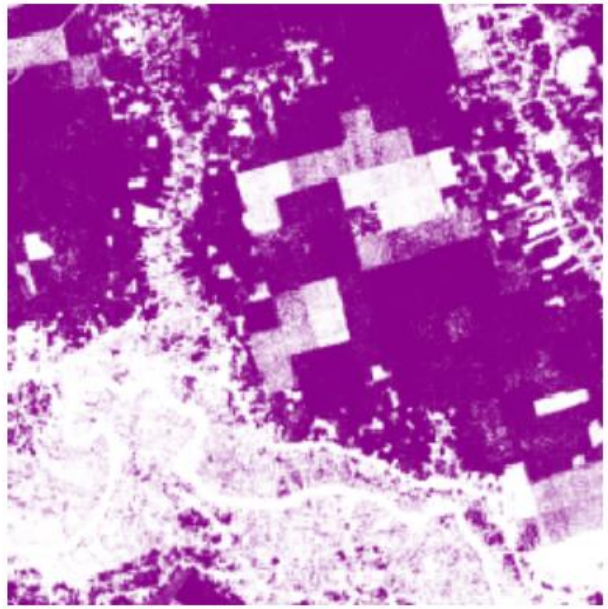
Forest Persistence v0



Palm Probability model 2024a



Rubber Tree Probability model 2024a



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Convergence of evidence

- No single geospatial layer of information can prove compliance
- Convergence of evidence from multiple layers can support compliance claims
- National circumstances and datasets should be taken into account
- Robust, transparent and reproducible analysis requires public datasets and processes

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Deforestation risk assessment workflow

GEOSPATIAL DATA PREPARATION

Tree cover / Forest
- EU JRC DD
- GLAD / ESA / JAXA
- National land cover/use map
- Add: …

Commodities
- Palm mask
- Cocoa mask
- National commodity map
- Add: …

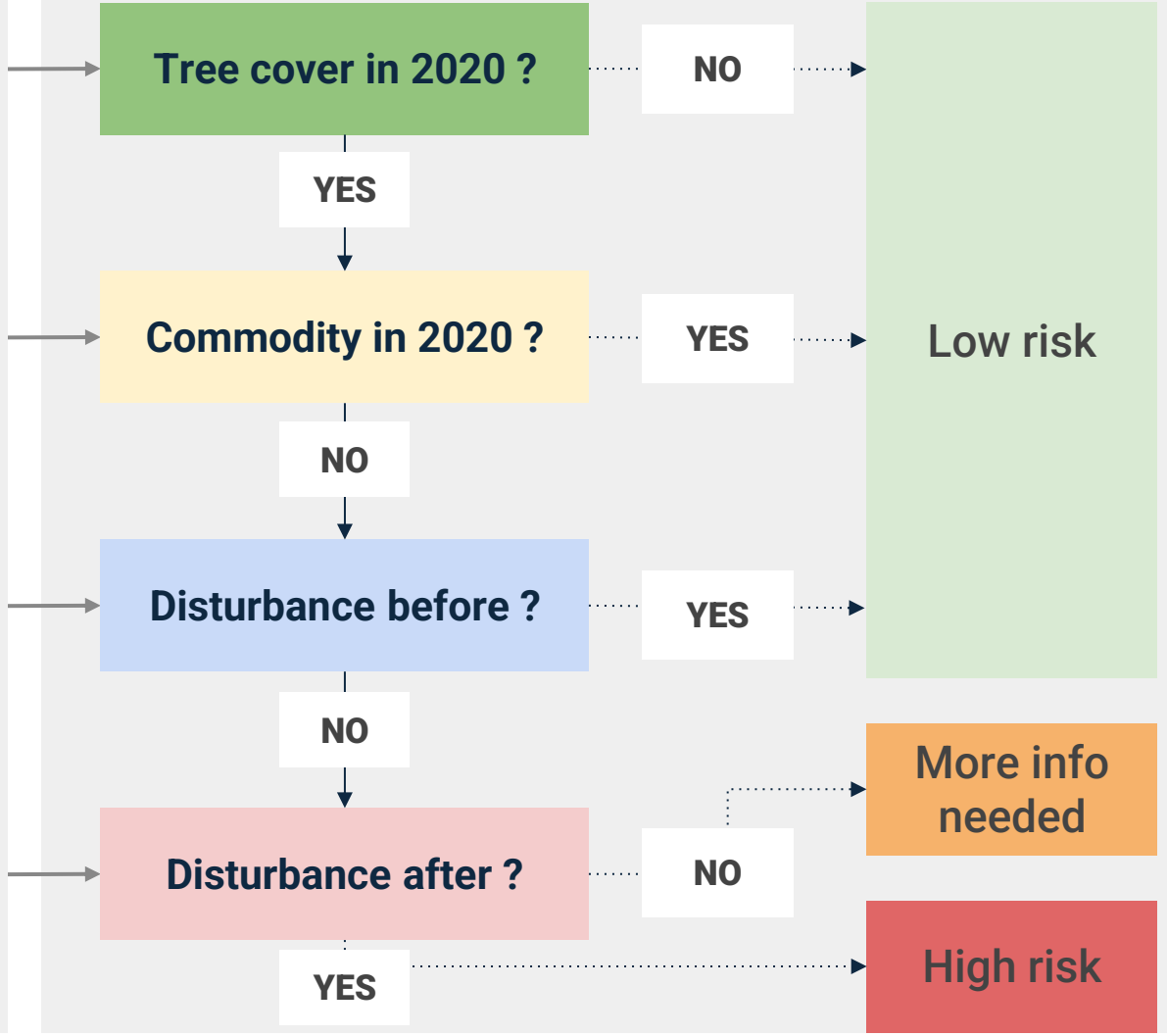
Disturbance before 2020
- GLAD / TMF (change product)
- RADD alerts
- MODIS fires
- Add: …

Disturbance after 2020
- GLAD / TMF (change product)
- RADD alerts
- MODIS fires
- Add: …

ZONAL STATISTICS

- geo-spatial analysis of all overlapping data within the plot
- output as CSV

RISK ASSESSMENT



Digital Public Infrastructure : Technical workflow

Sustainable Agriculture for Forest Ecosystems

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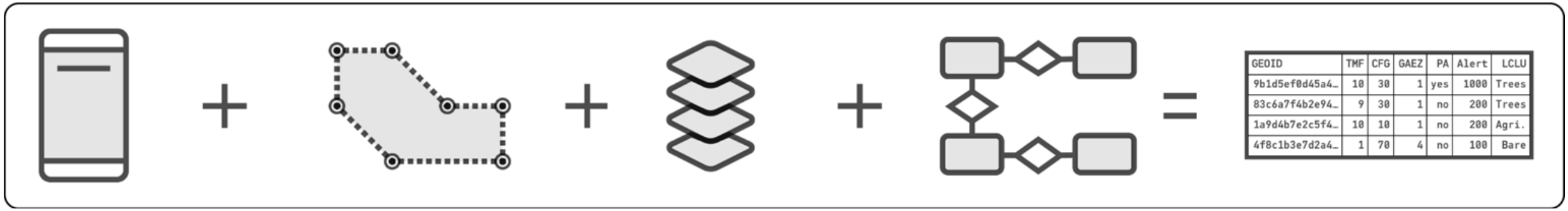

GEOID	TMF	CFG	GAEZ	PA	Alert	LCLU
9b1d5ef0d45a4…	10	30	1	yes	1000	Trees
83c6a7f4b2e94…	9	30	1	no	200	Trees
1a9d4b7e2c5f4…	10	10	1	no	200	Agri.
4f8c1b3e7d2a4…	1	70	4	no	100	Bare

AgStack
A Linux Foundation Project

Whisp

INA Sustainable Agricultural Supply Chain Initiative Trace

Global FieldID

Digital Public Infrastructure : People Workflow

Sustainable Agriculture for Forest Ecosystems

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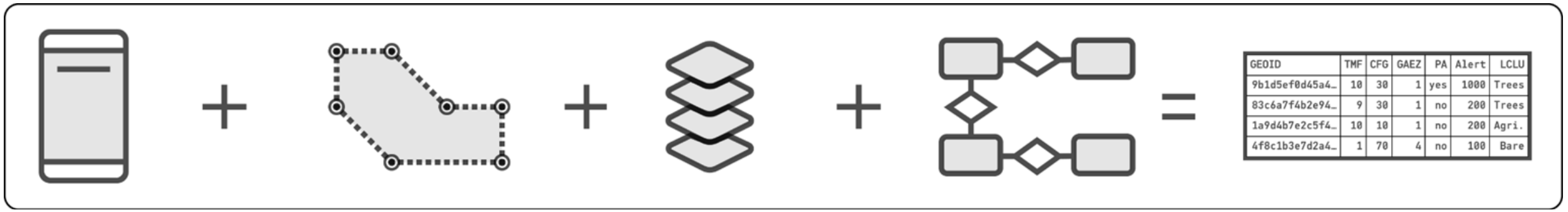

Data Standardization and Interoperability

Data Authorship, Management/Control, Access

Data Consent Processes

Data Confidentiality and Security

Collaborative Solutions to Data Sharing

Example user story: Geolocation data for a supply chain actor

*pain points

What areas have already been mapped? By who?

* Challenges to data sharing

Will they share the data with me?

How to establish and verify robust consent processes and data sharing protocols?

*Lack of widely adopted consent procedures

How is this data shared with me?
Is this process clear and efficient?

How do i verify and rectify the quality/accuracy of this data

How do I identify and resolve any overlaps/conflicting information

How do i compile this data into a database?

*Lack of data standardization, quality control and interoperability

Where are my remaining data gaps?

How to prioritize?

*field level mapping, is resource intensive

What is the process for collecting new location data?

What can be done to make this process more efficient?

Whose responsibility is it to map these areas?

*Lack of coordination and distribution on roles and resourcing

Is this a shared area of concern for other stakeholders? Is there any way for sharing responsibility for mapping these areas?

How is this data shared between necessary stakeholders (in a supply chain, regulatory agencies, etc)

*Disconnected databases, data systems and processes

How to ensure this database remains up to date

Can this data be further shared and consolidated so that others dont need to duplicate mapping and updating efforts?

How is this data incorporated into my own (and others) monitoring and due diligence systems?

*Not maximizing potential to apply data

Data Standards Working Group

Brings together subject area experts to co-develop and build consensus around **practical and implementable, published best practices and guidelines**

Seeks to collectively define scope, content, product outputs, communication and engagement approaches

AIM4Forests

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Topic Areas & Scope

Data Standardization and Interoperability

Typology, attribute information, technical considerations of data collection, data quality and verification, long term maintenance

Data Authorship, Management/Control, Access

Related definitions, roles, structures; equitability and cost and profit-sharing, incentives and disincentives

Consent Processes

Consent in the context of data collection, management and sharing; defining best practices; iteration and cycles of learning on processes

Data Confidentiality and Security

Ethical considerations; commercial sensitivities; legal considerations; data security challenges

Collaborative Solutions to Data Sharing

Making the case for collective action, known solutions, known blockers, cases “against” collaboration

Geolocation data (static data, not volumes) / Cross-commodity* / Cross-geography*

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Data Standardization and Interoperability

- Standardized **data hierarchies**
- Government-recognized **classifications and validation** methods

Legality and consent

- **Land Tenure & Policy** context & commodity-specific, complicating legal compliance
- **Consent in data sharing:** smallholders real and perceived risks and benefits; defining data access and governance remains a challenge

Collaborative Solutions to Data Sharing

- **Government-private sector-smallholder** alignment on mandates for data sharing and validation
- Harmonization on data collection and aggregation. Alignment for NDAs, sharing agreements
- **Public data access and quality**

Data Standardization and Interoperability

- **Accurate** forest and plantation maps available
- Guidance for compliance with geolocation requirements

Legality and consent

- **Legal compliance** difficult for farmers to prove legal production; land ownership and tenure considerations
- **Consent in data sharing**

Collaborative Solutions to Data Sharing

- **Government-private sector-smallholder** alignment on mandates for data sharing and validation
- **Country learnings:** different levels of success on country traceability models, use of platforms, blockchain, digital tools
- **Capacity building:** EUDR compliance (emphasis on geolocation)

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Thank you and Questions?

Additional Slides

Data Standardization and Interoperability

- Standardization of typology and classes of information, boundary data, attributes
- Standardized procedures for collecting geolocation data
- Verification protocols/quality control
- Farmer training programs
- Jurisdictional traceability programs
- Regional data collection hubs

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Additional Slides

Data Authorship, Management/Control, Access

Consent Processes

Data Confidentiality and Security

- Standard template of terms and conditions for geospatial data sharing
- Guidance for reviewing ethical, legal considerations for data sharing agreements and contracts
- Best practices based on examples of data sharing agreements
- Protocols (Integration of consent, authorized data access and secure sharing)
- Standard frameworks for land tenure classification

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Additional Slides

Collaborative Solutions for Data Sharing

- Recommendations on enabling conditions to enhance transparency, accountability and trust among supply chain actors in data landscape
- Successful models of cost sharing and incentives
- Processes and agreements to facilitate collective action for data sharing
- Interoperable data systems integrating public-private sector contributions & smallholder inclusion

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Federal Ministry
for Economic Cooperation
and Development

Implemented by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Thank you for joining !

See you at our next Lunchbreak in June.
The topic will be shared soon.