00521_ TRCM: IDH REQUEST FOR PROPOSALS (RFP) FOR CONSULTANCY SERVICES TO **MODEL A NATION-WIDE COCOA TRACEABILITY SYSTEM FOR CAMEROON, FROM FARMGATE TO PORT OF EXIT.**

Final Presentation Report

Prepared for ONCC and IDH

by

Transparent Collective-Voice Consortium

DOCUMENT INFORMATION

Full project title	IDH REQUEST FOR PROPOSALS (RFP) FOR CONSULTANCY SERVICES TO MODEL A NATION-WIDE COCOA TRACEABILITY SYSTEM FOR CAMEROON, FROM FARMGATE TO PORT OF EXIT.
Project Acronym	Cocoa traceability system design
Project Number	00521_ TRCM
Project Duration	January – March 2021
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Project Coordinator	Cooko Ltd. Cameroon
Project Contributors	Cooko GmbH, C-lever.org, Wageningen University
Project Website	cocoa-traceability.com
Deliverable	Final report (presentation) (to be read with full length version)
Delivery Date	06 April 2022
Precedent Document	200218 Interim report final.pdf
Reference contract	TBC
Author(s)	Ferdi van Heerden, Patrick Stoop, Verina Ingram
Submitted on date	06 April 2022
Submitted to	ONCC (Mr. Doping, DG), IDH (Elvis Ngwa, PM)
Dissemination level	○ Public ○ Confidential

Agenda

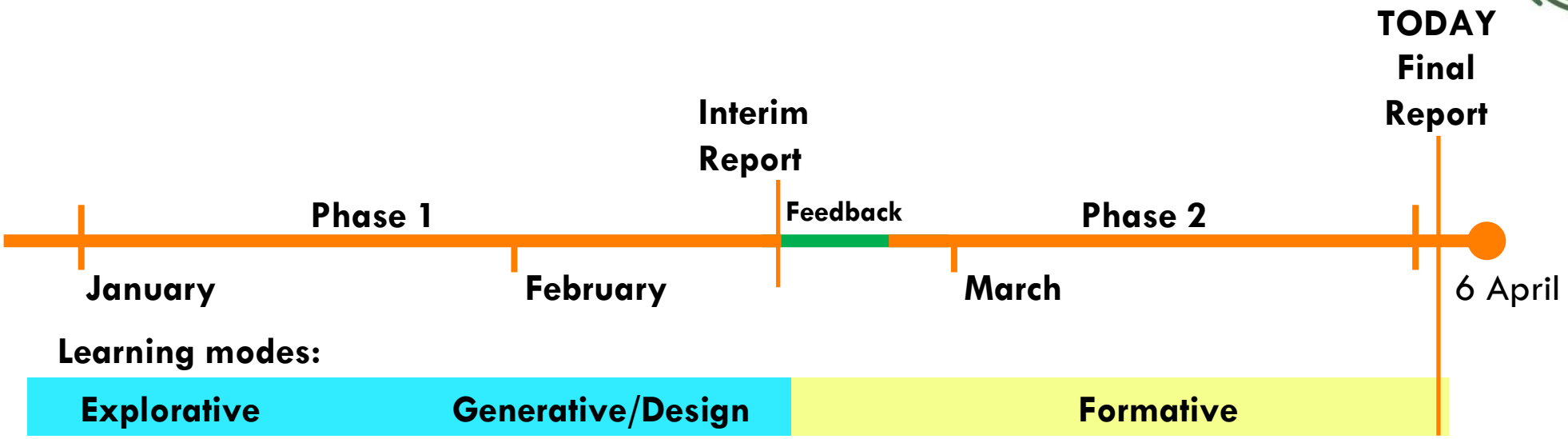
1. Recap of the process (where are we today)
2. Summary of key findings from interim review
3. Vision and Strategic Choices
4. Costs
5. Next steps
6. Discussion in small groups and feedback

“If I had asked people what they wanted, they would have said faster horses.”

Henry Ford

1. Recap on process

Where we are today:



This represents the final presentation of our consultation project. In this document you find the high level strategy and blueprint for a national traceability system.

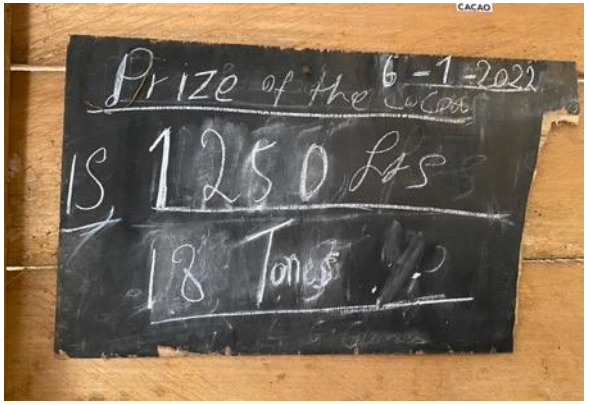
This document has been designed to serve as a foundational document for implementation planning.

Recap on process

- RFP issued – 3 November 2021
- 1st RFP Response – 10 November 2021
- Final RFP Submission – 30 November 2021
- Awarded project – 21 December 2021
- Inception report – 29 December 2021
- Fieldwork start – 12 January 2022
- Nitidae alignment meeting – 26 January 2022
- Fieldwork conclude – 29 January 2022
- Expert interviews – 10 January – 14 February 2022
- Analysis/synthesis – 30 January to 17 February 2022
- Interim presentation – 18 February 2022
- Feedback surveys and interviews – 21 February – 1 March 2022
- Benchmarking research – 21 February – 30 March 2022
- Nitidae alignment meeting – 3 March 2022
- Review EU parliament feedback on draft legislation – 30 March 2022
- Synthesis and design – 4 March – 1 April 2022

Recap on process

Recap on process



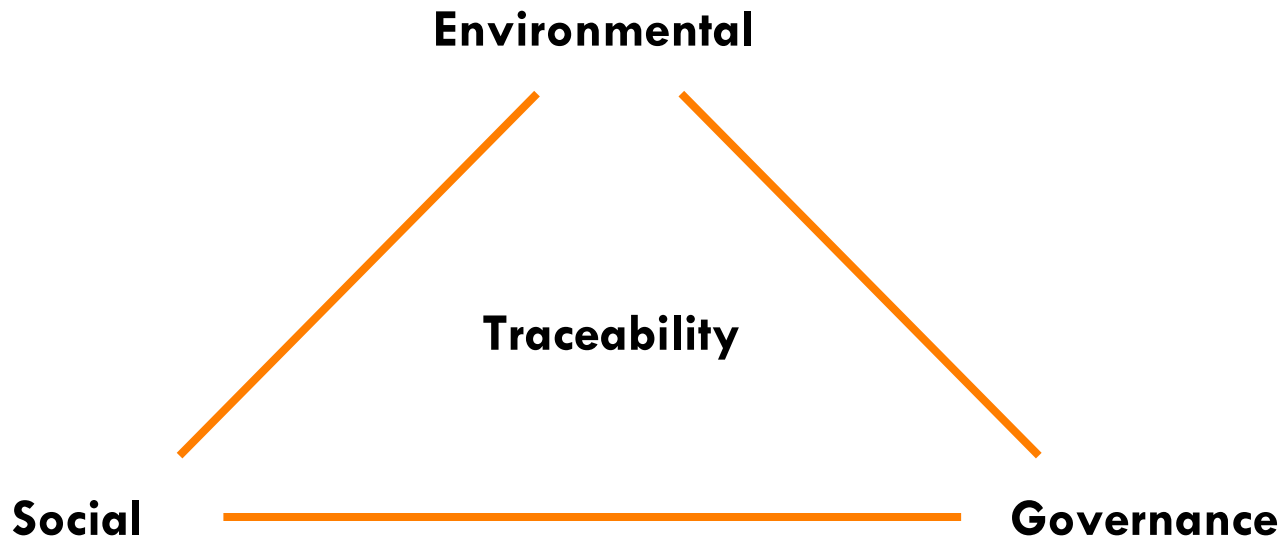
Who is this report for?

- This report is aimed at providing ONCC with the basis for implementing a new traceability system for cocoa (from farmgate to port of export)
- The document is prepared to be shared with the signatories of the Roadmap for Deforestation-free Cocoa in Cameroon, under the auspices of IDH
- This document is intended to serve as a reference for the process of alignment and action for deployment

2. Key Findings

2.1. What is traceability

Restating the objective



E/S/G need to be in balance to function coherently.

A national (cocoa) traceability system for Cameroon needs to create the framework/foundation for understanding and acting on Environmental, Social and Governance issues.
IDH-ONCC's RFP highlights environmental concerns, in response to upcoming "deforestation-free" requirements, but we need to ensure that the system is future proof by anticipating new requirements on environmental and other dimensions.

Key Observations: Traceability

- Traceability demands are driven by the end of the value chain!
- Export quality standards, traders' & manufacturers' use of certification systems, proposed EU Directives often drive short term and bureaucratic approaches to traceability
  - > Certification is largely a demand driven phenomenon and not reflective of supply or producer needs
- Buying and selling quotas / practices for certified beans distort traceability, do not capture ESG data and produce perverse incentives
- Farmgate price & cash purchase way far more than current premiums
- Data is declarative and not generated by or verified against actual quality and quantity at farmer level, and supply chain behaviour
- Traceability in its current form is primarily a one-way "compliance" requirement

  => Feedback loops & rewards for farmers / start of chain are missing

What is (cocoa) traceability?

Minimal
Just knowing where cocoa was produced (or sourced from)

→

Extended
Detailed information on sustainability and other characteristics at origin and along value chain

↓

Policy info, sector regulations, value chain governance

Feedback loops to farmers, coop's, stakeholders, …

Access to impact funding ….

Full ESG info: Environmental, Social and Governance reporting

Environmental Due Diligence (EDD) - Human Rights Due Diligence (HRDD)

Impact Measurement & Management (IMM) => SDG Impact reporting

Traceability framework: ESG lens

1. Origin Characteristics → **2. Pathway Characteristics**

Environmental:

1. Land use (deforestation, forest / bio-diversity friendly)
2. Chemical load
3. Water/Air quality/Pollution

Social

1. Decent work at farm level
2. Living wage - Livelihoods
3. Children's needs and rights
4. Discrimination

Governance:

1. Legality
2. Pricing
3. Rights

Environmental:

1. Environmental footprint transport, processing, …
2. Chemical load
3. Water/Air quality/Pollution

Social

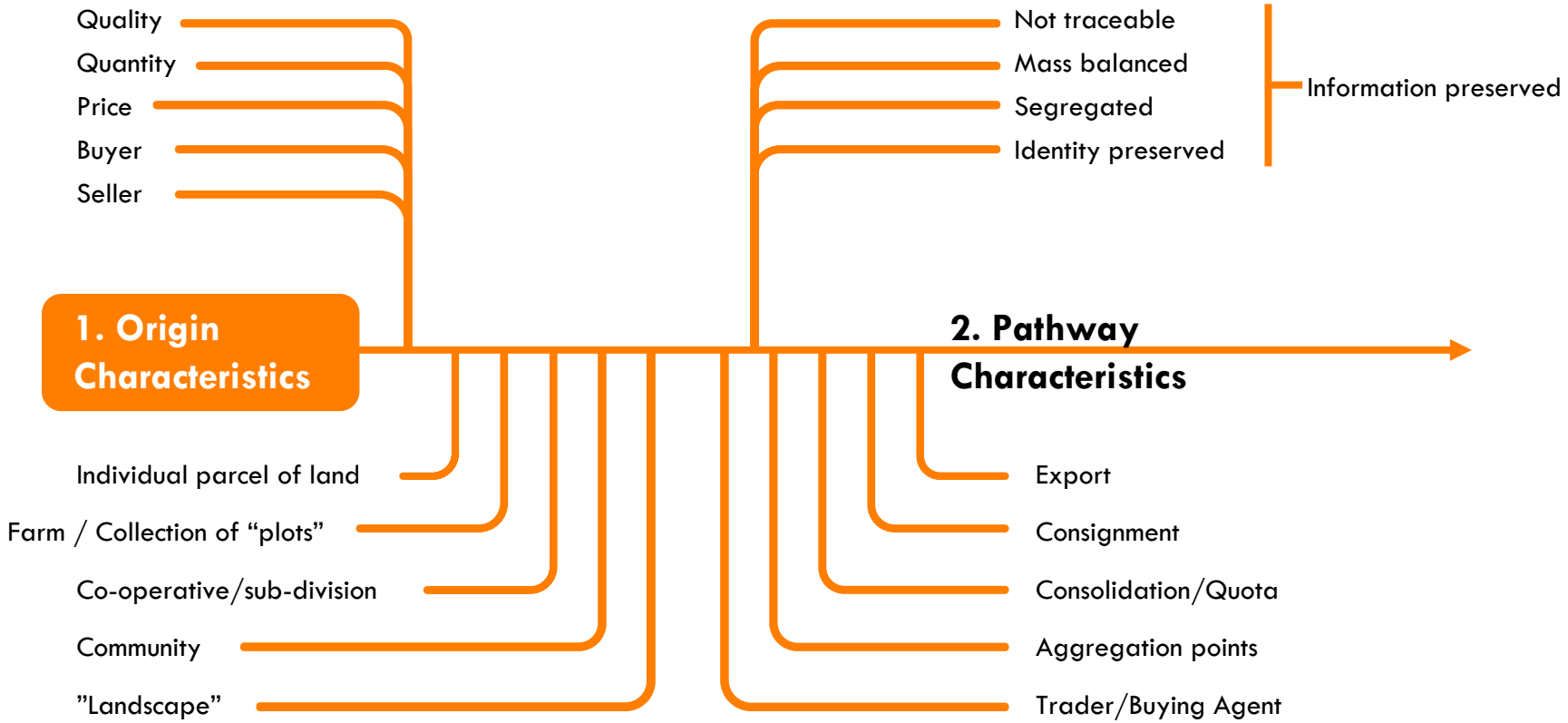
1. Labour rights
2. Living wage
3. Discrimination

Governance:

1. Legality
2. Pricing
3. Rights

Current legislation / deforestation free requirements focus on one (compliance) aspect of environmental data; but a scalable framework needs to anticipate all ESG dimensions

Traceability framework data accumulation: e.g. Environment



2.2 Incentives

Instrumental vs Normative controls

- Compliance based carrot and stick (**instrumental controls**) have limited ability to change behaviour
  - And create "task centric" incentives, e.g. gaming and corrupting the system
  - Expensive to maintain
- **Normative controls** are based on community values, shared objectives and common *(incentives-based)* interests
  - Outcome based incentives to be expressed and reinforced all along the value chain, including at community level

Avoidance vs Achievement Objectives

In formulating the intended outcomes / objectives we have a choice of focus in terms of

- Stating causes of harm, we wish to avoid leads to a narrow and particular framing:
  - Avoid sourcing products deriving from (new) deforestation
  - Avoid child labour
  - Avoid known forms of economic exploitation

Versus

- Stating the positive outcome we wish to achieve opens new avenues and opportunities to intervene:
  - Active Forest Preservation / Management, Biodiversity and Reforestation
  - Access to Education (literacy/numeracy/life skills), Safe Environments, Nutrition & Health for children
  - Equitable Income and Income Distribution

- The choice of formulation fundamentally anchors the framework and appreciation of adequate incentives

Avoidance vs Achievement Objectives

When you incentivise ”avoid negative” people will only move as far as they need to avoid the pain.

See Mandela

The motivation, time and energy released to achieve desirable rewards is much higher

Incentivising “Achievement” outcomes

From “Deforestation free cocoa” to “Forest friendly cocoa”

In line with ARS (African Regional Standard) and CAC (Cadre d’Action Commun)

“Deforestation free cocoa”
Cocoa coming from a plot not deforested since 2020

Regardless of the fact that forests in the cocoa producing area might still continue to disappear without reforestation happening.

→

“Forest friendly cocoa”
Cocoa coming from land not deforested since 2020 & from a cocoa producing area and community that are successful in preserving and restoring its forests
(with a scoring to be developed.

Incentivising "Achievement" outcomes

From "Child labour free cocoa" to "Child friendly cocoa"

"Child labour free cocoa"

= cocoa produced by a farm / community covered by a CLMRS, …

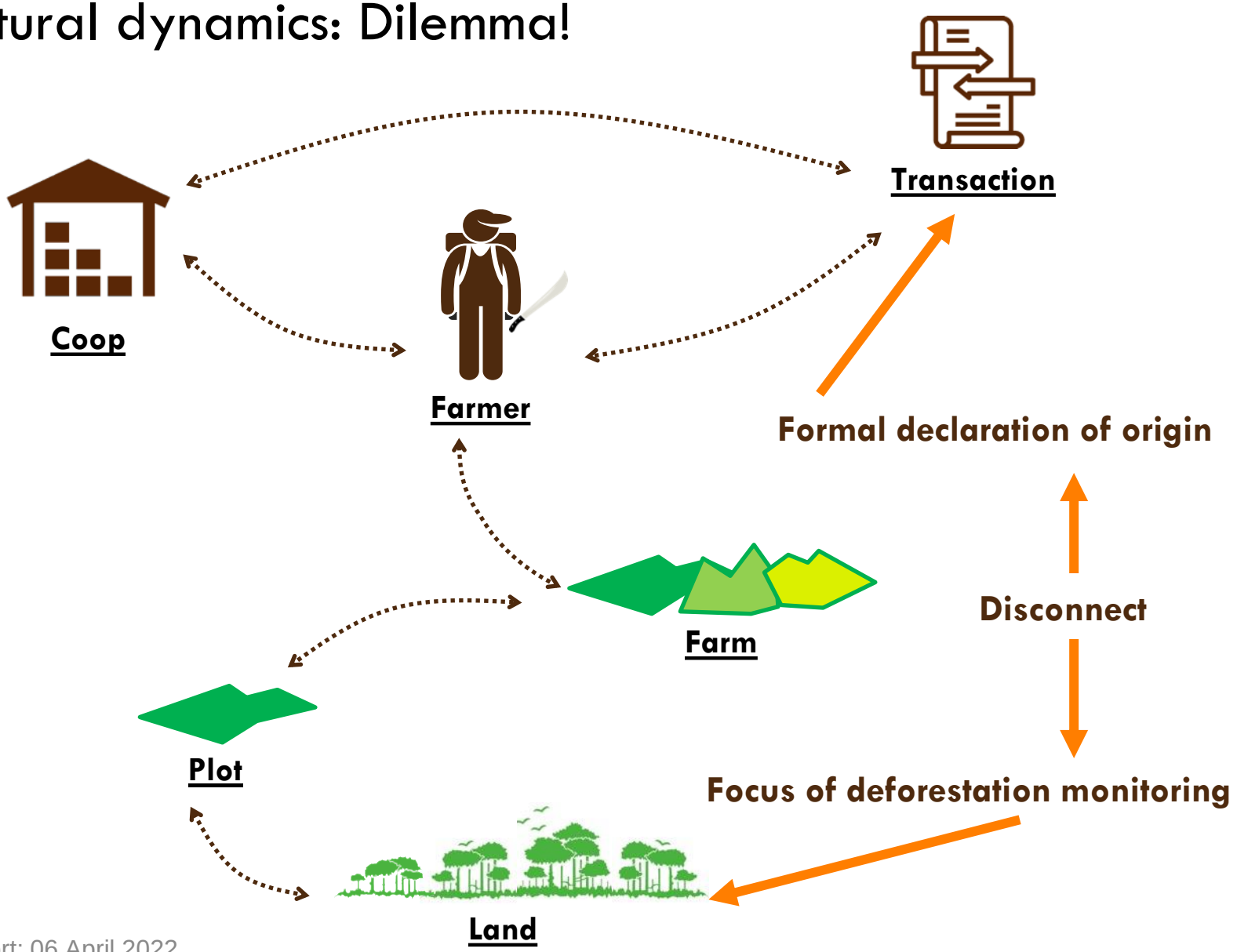
Regardless of the fact that child labour might be displaced to activities outside the cocoa value chain, more hidden and therefore harsher, children might be malnourished not gaining literacy / numeracy / live skills, etc.

"Child friendly cocoa"

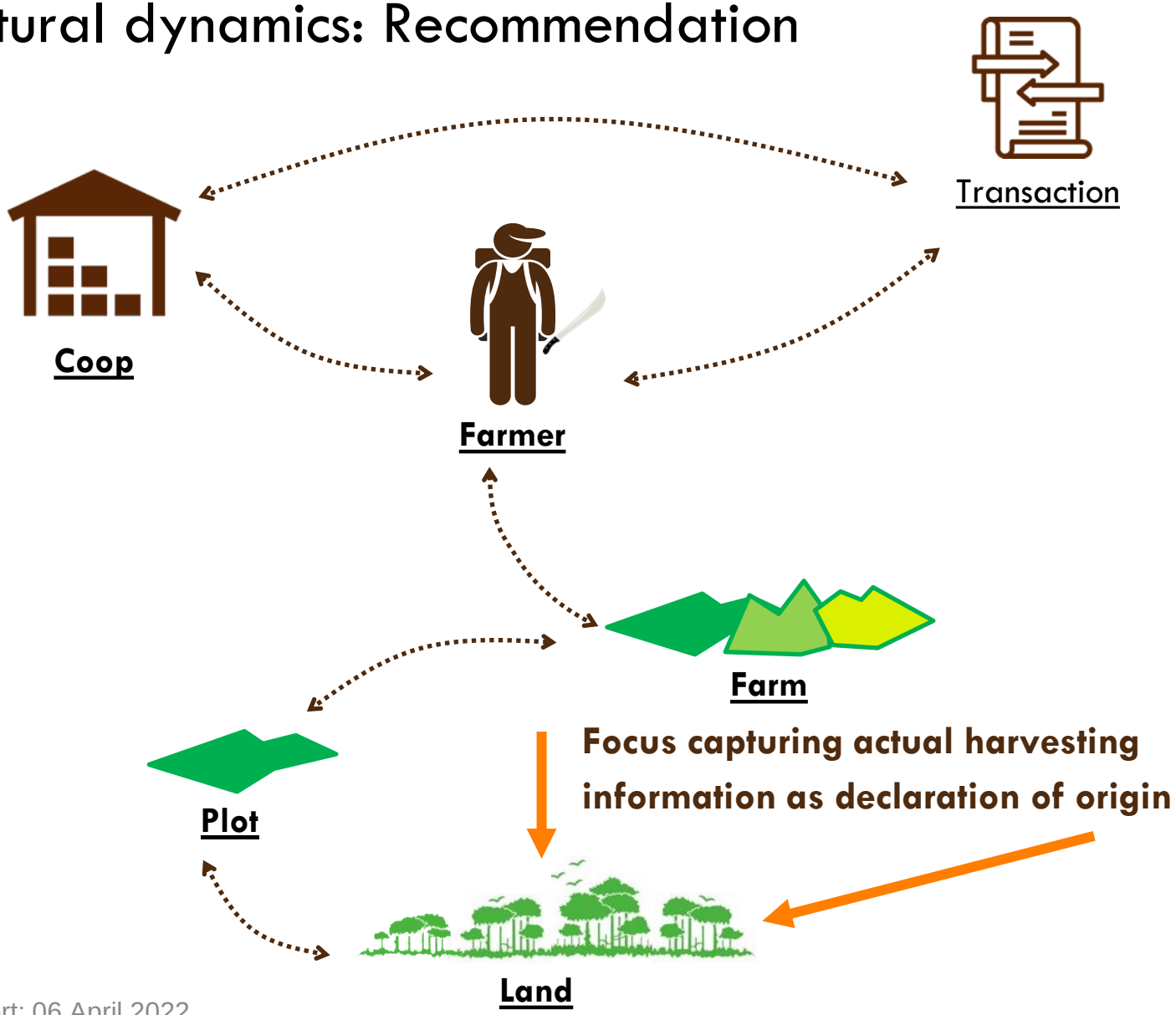
Cocoa coming from a cocoa producing area / community that is engaged in and demonstrates performance and success in better attaining children's basic needs and right;
acknowledging the need for (and desire of) children to contribute to the community but effectively mitigating related risks and improving nutrition, literacy / numeracy / live skills, physical and mental health of children.

2.3 1st Mile

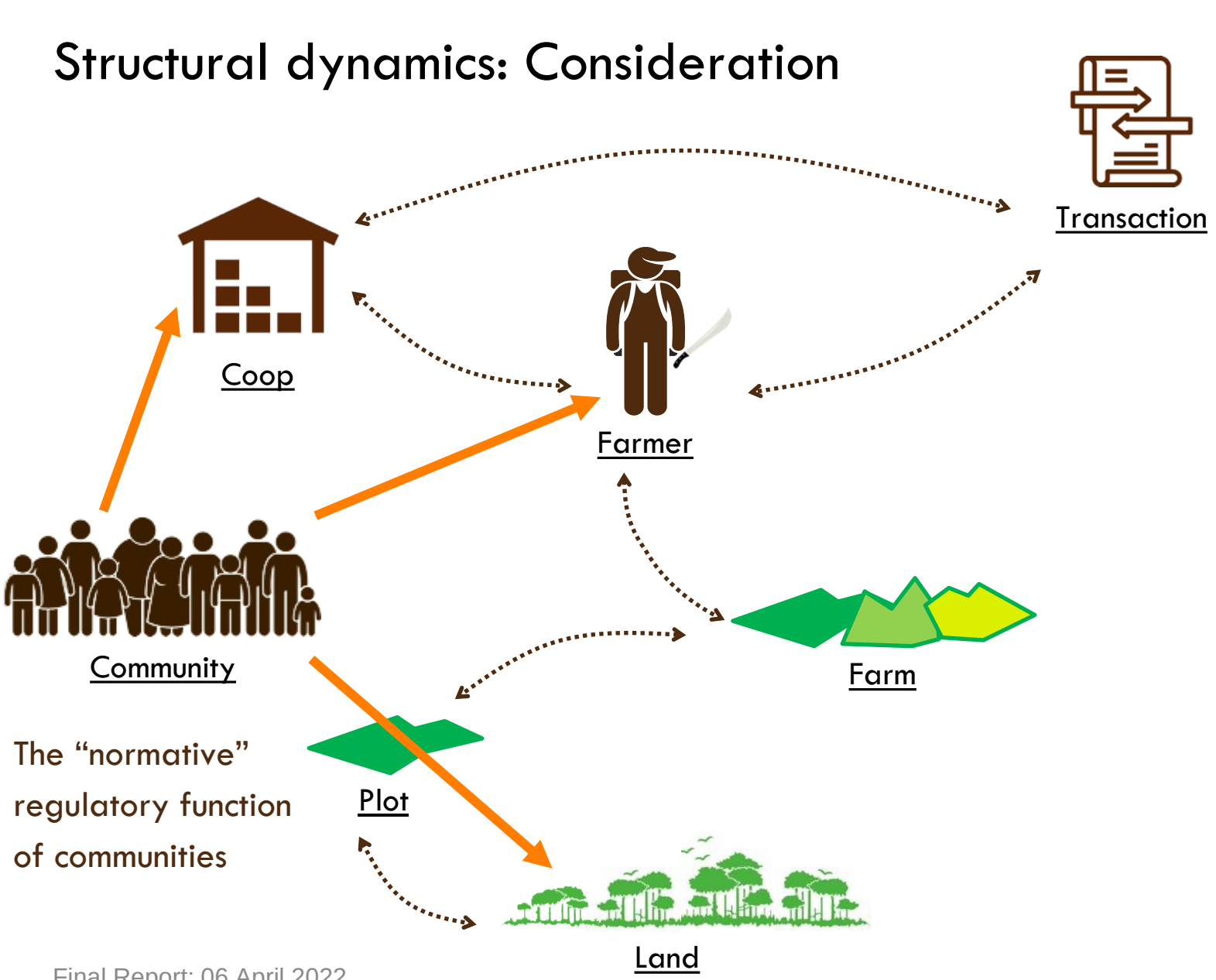
Structural dynamics: Dilemma!



Structural dynamics: Recommendation

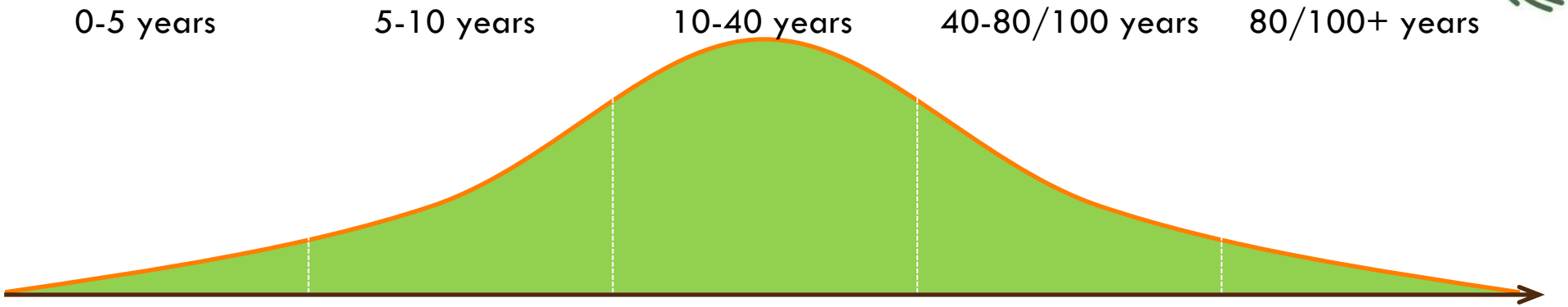


Structural dynamics: Consideration



The "normative" regulatory function of communities

Farm Lifecycle Risk profile



	Creation	Growth	Maturity	Decline	Disuse
Impact	!!!	!!	!	+	++
Influence	+++	++	+	?	++

In Summary

Price and payment terms are the main factors that shifts beans from the farm/coop

2.6. Paradigm Shifts

We are suggestion the following shifts

FROM		TO
Start at “Farm Gate”	→	Start at “Farm Creation”
Certification	→	Traceability
Documentation centric	→	Activity/Behaviour focussed
Compliance led programs	→	Sustainability led incentives / rewards
“Avoid” incentives	→	“Attain” incentives
External sanctions	→	Community norm regulation + meaningful incentives
Traceability as a burden	→	Traceability as an enabler
Exporting Beans	→	**Exporting Beans + ESG Data (representing trustworthy / marketable sustainability achievements or claims)**

3. Vision & strategic choices

3.1. Initial strategic choices

Strategic choice 1: Alignment

Vision for Cameroon's Traceability System

Establish traceability and overall governance of cocoa value chain to:

- empower a new generation of digitally enabled and sustainability driven agri-entrepreneurs
- expose and promote sustainable farming practices
- capture and reward ESG achievements (=> trustworthy ESG **data**) and
  - Pricing structures for hybrid (data + beans) cocoa
- foster transparency and effectively identify ESG value chain risks

- Ultimately differentiate Cameroon as a reliable, valuable, sustainable and efficient country of origin

Strategic choice 2: Harmonisation

Do we want one or multiple supply chains?

- Will the redesigned traceability system serve as the base mode of operation?
- OR serve a segregated EU/market compliance specific set of standards?
- Establishing and supporting multiple systems can creates new complexity and perverse incentives

- To ultimately differentiate Cameroon as a reliable, valuable, sustainable and efficient country of origin

= One system

Strategic choice 3: Scope

Do we want a scalable or limited system?

- Will the redesigned traceability system be customised to serve only cocoa?
- OR serve a scalable template for other commodities?
- Harmonising the approach across commodities simplifies and reduces national cost
- Apply synergies and provide comprehensive support to producers

- To ultimately differentiate Cameroon as a reliable, valuable, sustainable and efficient country of origin

= National statement

Strategic choices 4: Characteristics

- Accurate information
- Verifiable information (by who, when and where)

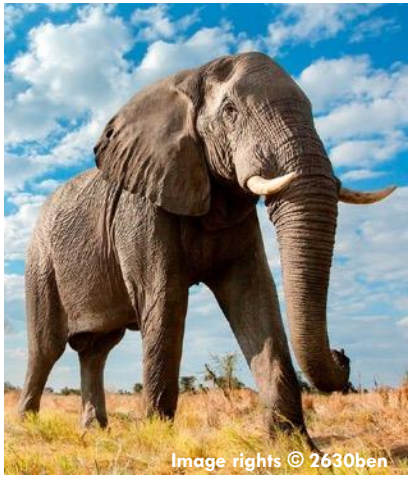
  => innovative sources of trustworthiness assurance
- Efficient operations
- Support to public policy making and enforcement
- Value added for all actors
- Interoperability and synergy (instead of duplication) of (existing and new) traceability systems

System Characteristics

Landscape of options presented at Interim presentation:

Oversight
Has whole market in view
Indirect engagement
Traceability "Oversight"

Agile
Acts where needed
Collaborative/communicative
Traceability "Enabler"



Forceful
Sets pace and direction
Direct engagement
Traceability "Sheriff"

Increasing degree of enforcement and engagement on the ground

Suggested Mode of Engagement

From its vantage point ONCC can monitor the movements of the whole field, yet has the teeth for specific interventions when the system is out of balance.

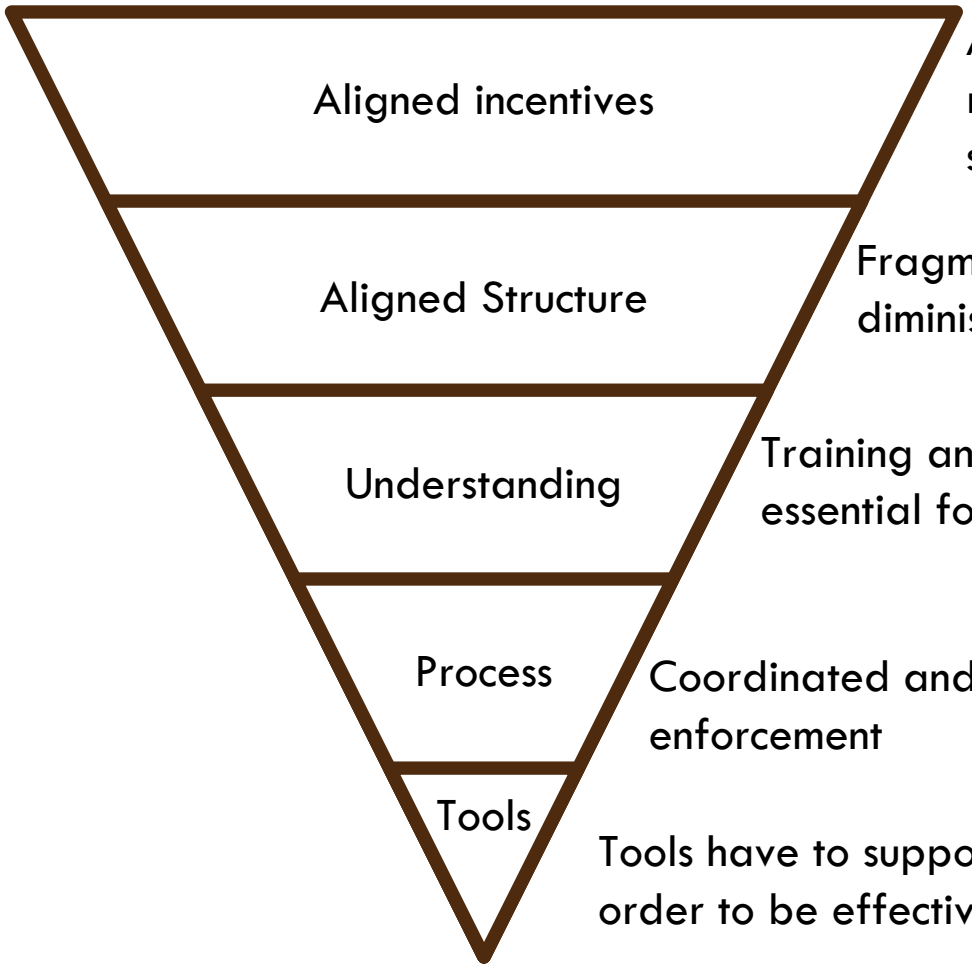
Tactical considerations

- Immediate risk mitigation investment on high-risk profiles :
  - At risk geographies & community/landscape profiles
  - Early-stage farm/plot development
  - Positive versus negative incentives
- Bring financial traceability closer to point of harvest
- Adapt pricing and buying behaviour to be in line with sustainability / ESG commitments of customers
- Transform the business of the trader / intermediary to be sustainability driven and rewarded!
- Harmonized “source data” for interoperability – *international alignment*

3.2. Design Principles

1. Respect
2. Holistic Perspective
3. Comprehensive Inter-operability
4. Inclusive Digitalisation
5. Transparent Incentives

System dynamics



A system wide culture of aligned incentives is required for sustained implementation and use of the system

Fragmented misaligned and siloed structures greatly diminish effectiveness

Training and communication with common definitions is essential for task alignment and collaboration

Coordinated and concerted controls, monitoring and enforcement

Tools have to support the context and process in order to be effective

3.2.1. Respect

3.2.2. Holistic Perspective

3.2.3. Inter-operability

3.2.4. Inclusive Digitalisation

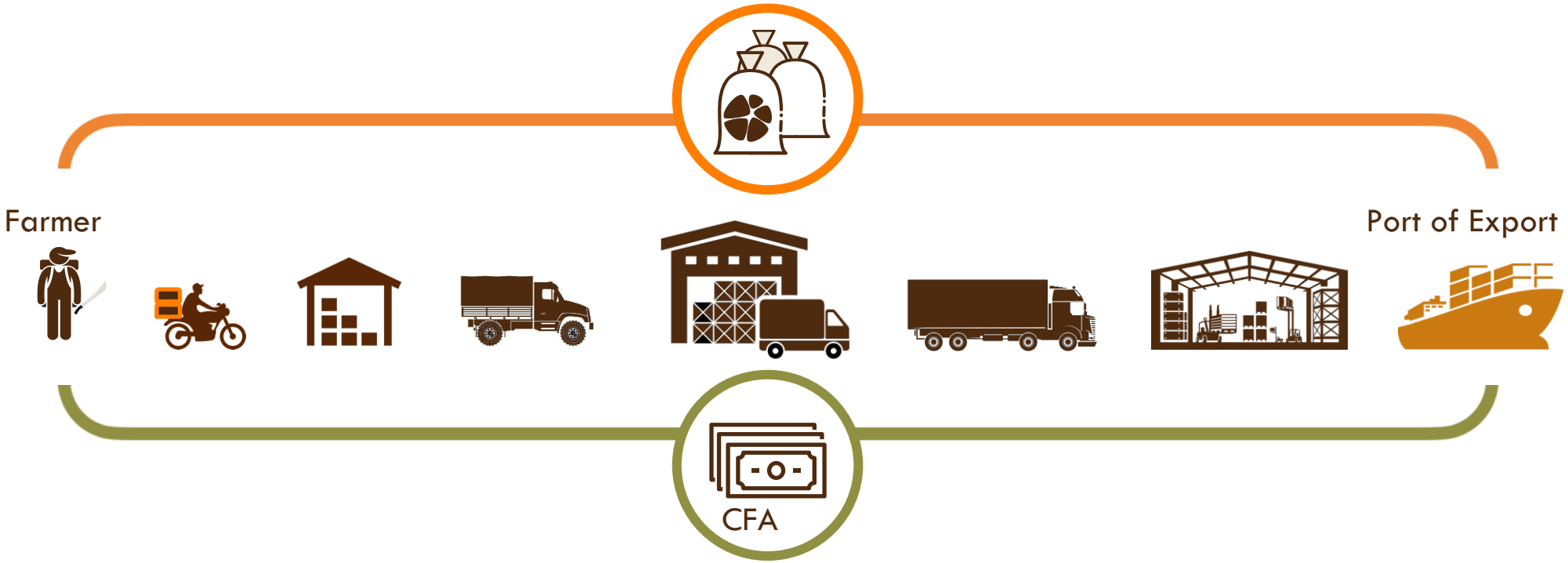
3.2.5. Transparent Incentives

3.3. Strategy

3.3.1. Digitally linked transactions

Making the Links Clear

Current flows of cocoa and money creates a chain of custody that is not always clearly documented or transparent



Financial traceability is the key to understanding the chain of custody:

> If the flow of money is digitalised it can clarify the flows of cocoa

Digitally Linked Transactions

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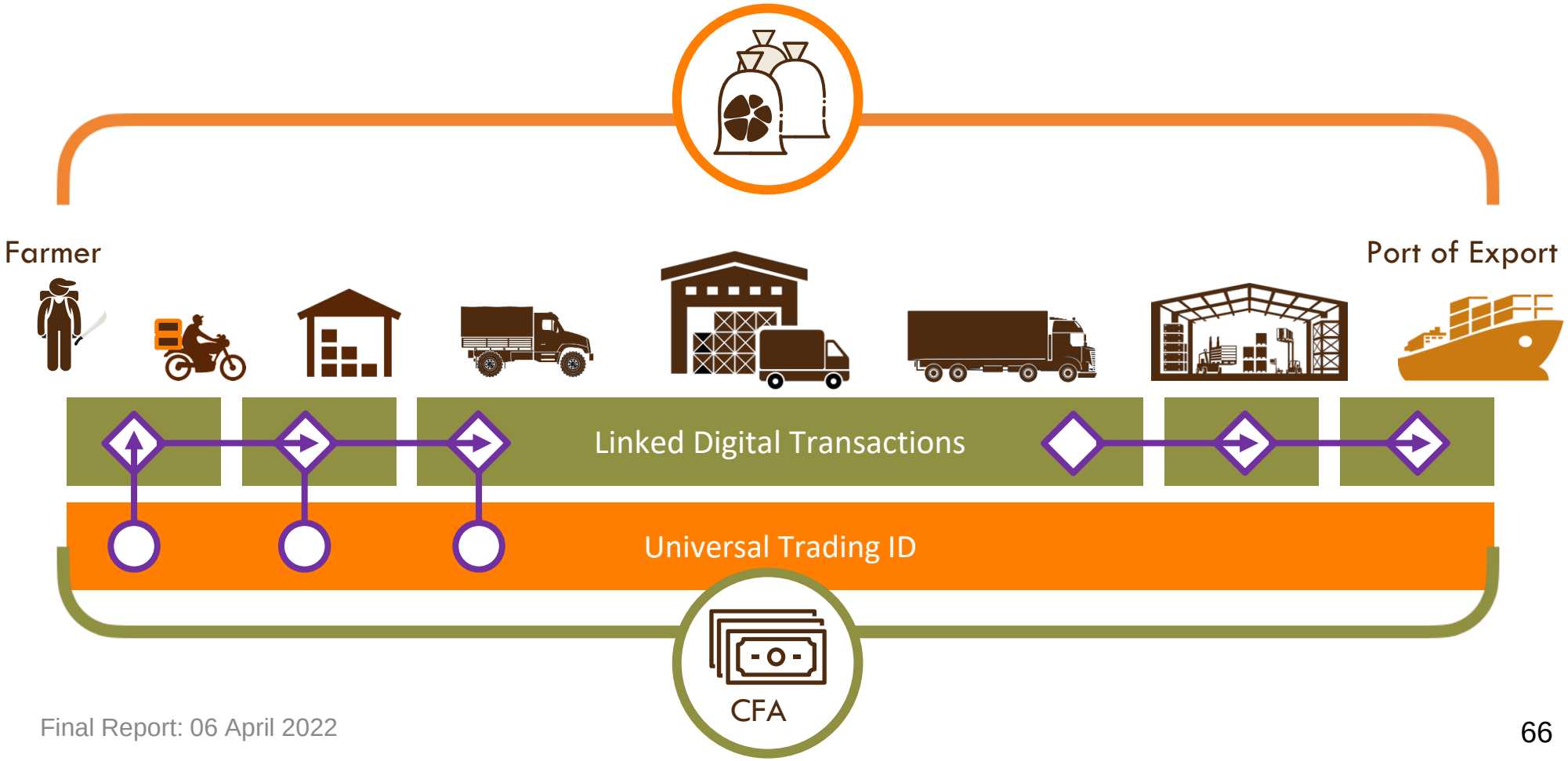
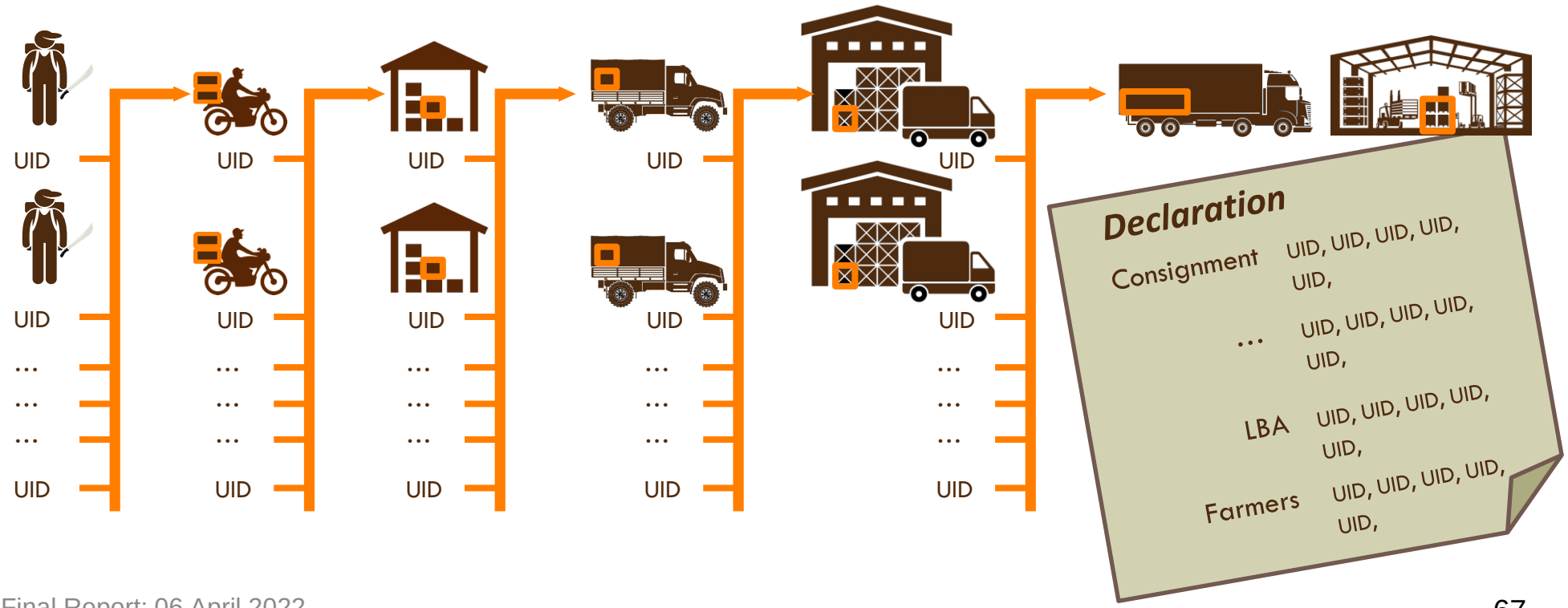


Transparency is Key for Chain of Custody

- Establishing a **linked transaction system** allows us to trace the origin of cocoa
- Every sales receipt should include the **unique trading ID** of each value chain actor
- Like a VAT system, this allows us to establish inputs and outputs at every stage of the chain => traceable chain of custody with financial and commodity transactions duly documented



3.3.2. Geo-referencing

Grounded in Place

Each bag/batch of cocoa needs to have a clear geo-reference

- As single farmers may have multiple plots, farms or concessions the geographic reference needs to relate to the cocoa, **not** the farmer
- Detailed geo-mapping of plots + linking cocoa bags sourced to these plots is not the only or always most suitable solution for Cameroon
    - Consistent underestimation of efforts and time needed to: (a) conduct and complete b) maintain and update trustworthy detailed geo-mapping.
    - Experience in Ghana and Côte d'Ivoire also show more difficulties to extend geo-mapping of plots beyond longer established 'direct' supply chains
    - Important hurdles (on land rights, concessions, …) may hamper roll-out
    - Volatility in relations between plots, farmers, farms, crops, plot use, etc.
    - Traditional Cameroon production of cocoa under tree cover, with dispersed pockets of cocoa production embedded in forests, may be environmental-friendly but complicates geo-mapping of plots and comparability with plots mapped elsewhere

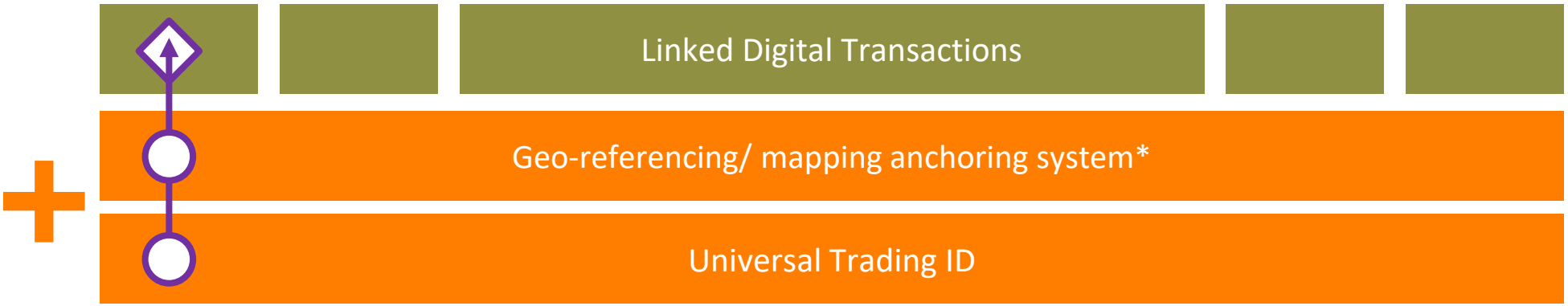
Grounded in Place

Each bag/batch of cocoa needs to have a clear geo-reference *(continued)*

- Conclusion: detailed geo-mapping of plots may be wise when the mapping is conducted with a multiple objective (securing land use rights of farmers, transforming sharecroppers in smallholder farmers, using drones to generate geo-reference agri-analytics and advice, etc.) and when feasibility of local implementation and maintenance has been assessed and confirmed.
- But generalised geo-mapping of plots is not a quick-win solution, the concept is less adapted traditional cocoa production in Cameroon and the country has little experience with this geo-mapping,
- However, geo-referencing the point of harvest, combined with collecting data on time of harvest, multi-actor collection/confirmation of ESG data at time of harvest, and financial traceability combined may even provide more effective means of verification.

Grounded in Transactions

- The geo-referencing of each bag/batch needs to be reflected on the receipts of transactions:

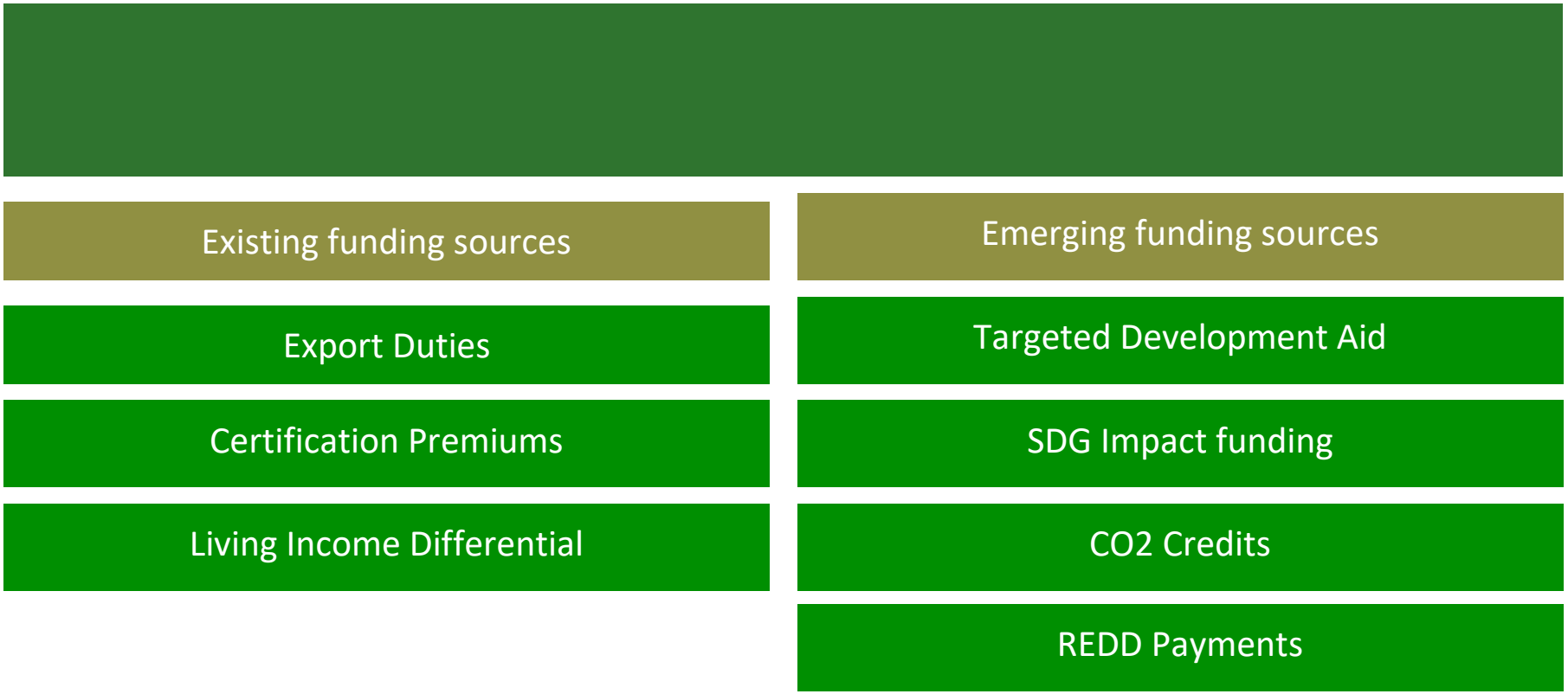


* Cross referenced with national forest & tree cover mapping system

3.3.3. Incentives process
Scenarios for rewarding sustainability achievements

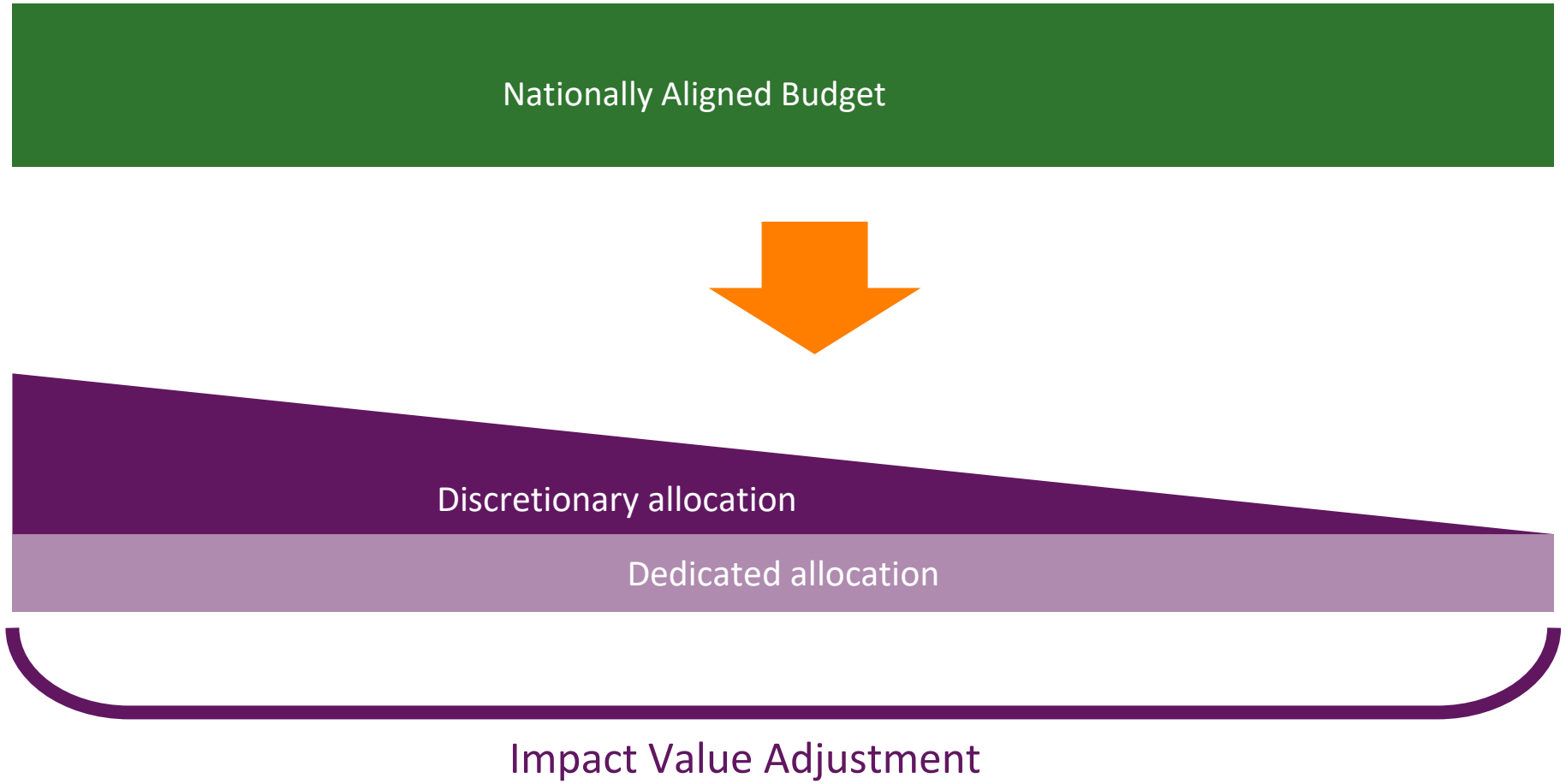
Aligned Budget

A national incentive budget should be established to focus on driving harmonised action towards sustainability



Targeted Budget

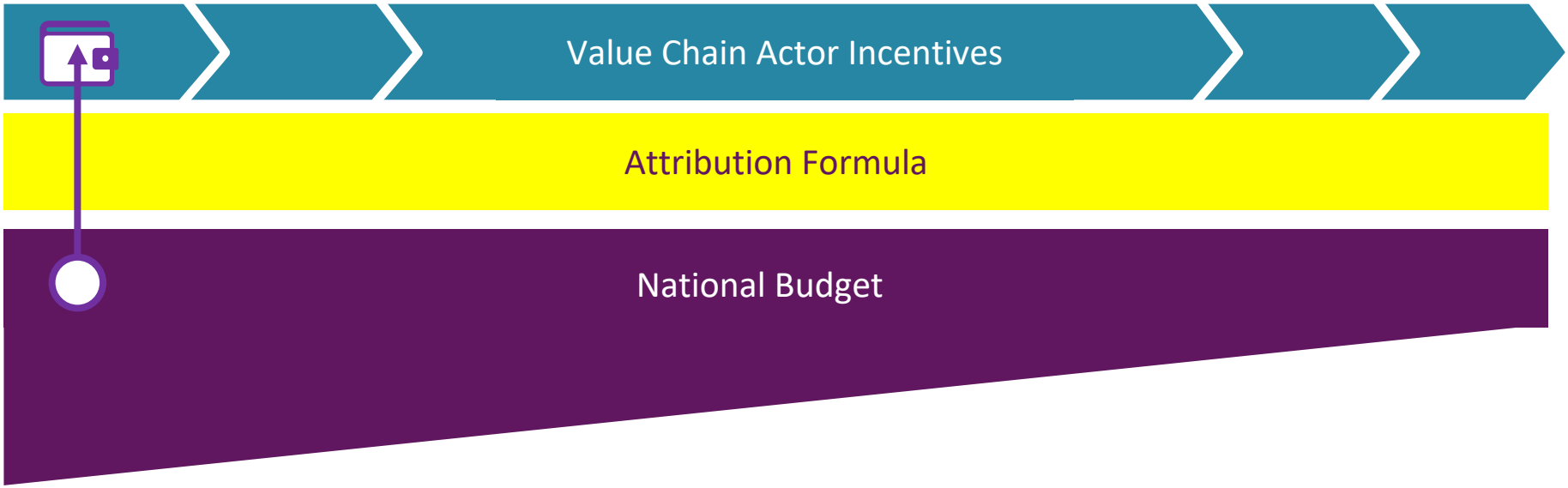
We propose a mechanism for aligning the budget towards targeted action to compensate for market failures:



Impact Value Adjusted Budget

The IVA (Impact Value Adjustment) becomes the aligned budget for the targeted allocation of sustainability incentives

The attribution logic is driven by national ESG policy and priorities



Highly adaptable, scalable and future proof tool!

IVA Attribution Formula

This is the central part of the system and will require extensive analysis and testing to validate.

We propose an incentive level is calculated at an individual level based on three key variables:

Incentive = (Scope of Impact x % of Volume) x IVA rate

Scope of Impact is the key determinant that links the incentive with Environmental, Social and Governance Impacts. These factors may include examples such as forest cover, farming practice, social factors and is determined by the national standing committee.

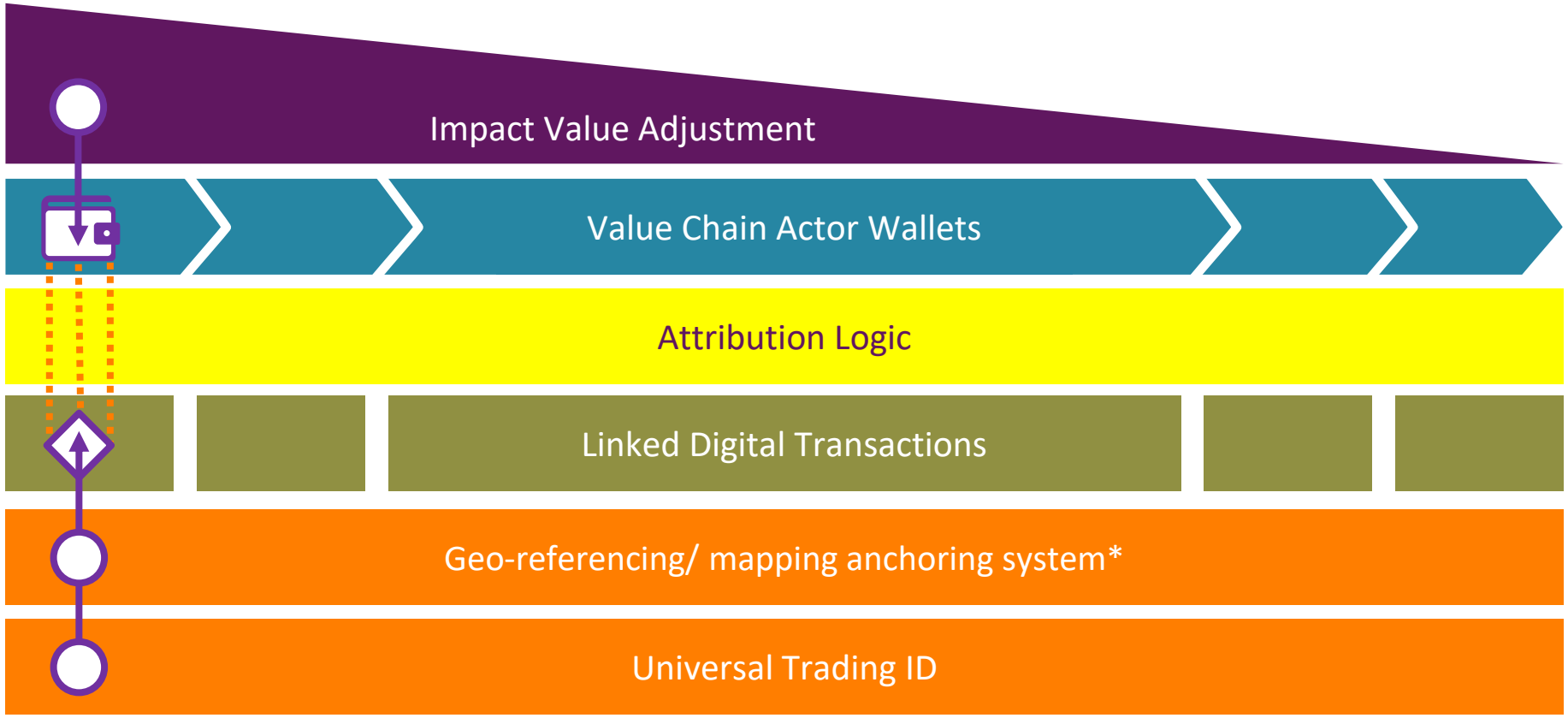
% of Volume reflects the value actor's ability to demonstrate achievement of specific standards or criteria. In essence reflecting the up-stream compliance captured at a particular point in the value chain.

IVA rate is dynamic and determined by the national budget, adaptive risk register, regional classification plus commodity specific factors.

3.3.4. Traceability System Blueprint

IVA Driven Traceability

The Impact Value Adjustment system requires the interaction between various linked systems:



* Cross referenced with national forest & tree cover mapping system

The IVA process sets up double accounting principles

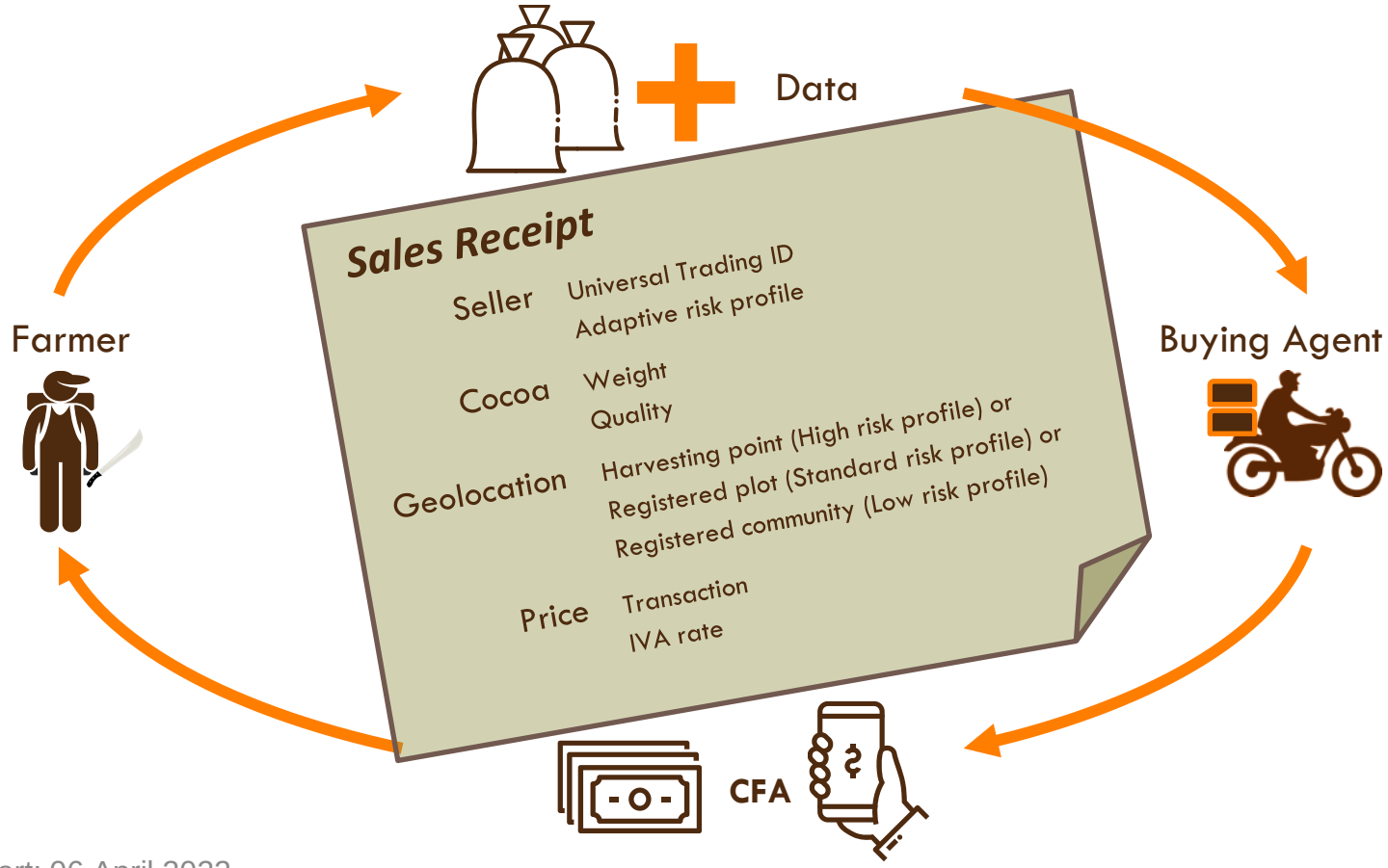
- Each party has a copy of the transaction record that can be compared
- The Universal Trading ID creates a red thread for reference and comparison of documents
- By embedding the ID through the value chain we can cross reference for consistency at any point in the chain:
    - Do the value chain actors who are listed claim the same volumes?
    - Do the document links confirm the chain of custody?

Value Actor Perspective (extract)

The individual IVA is dependent on the linkages in the system

> Broken link = no incentive payment

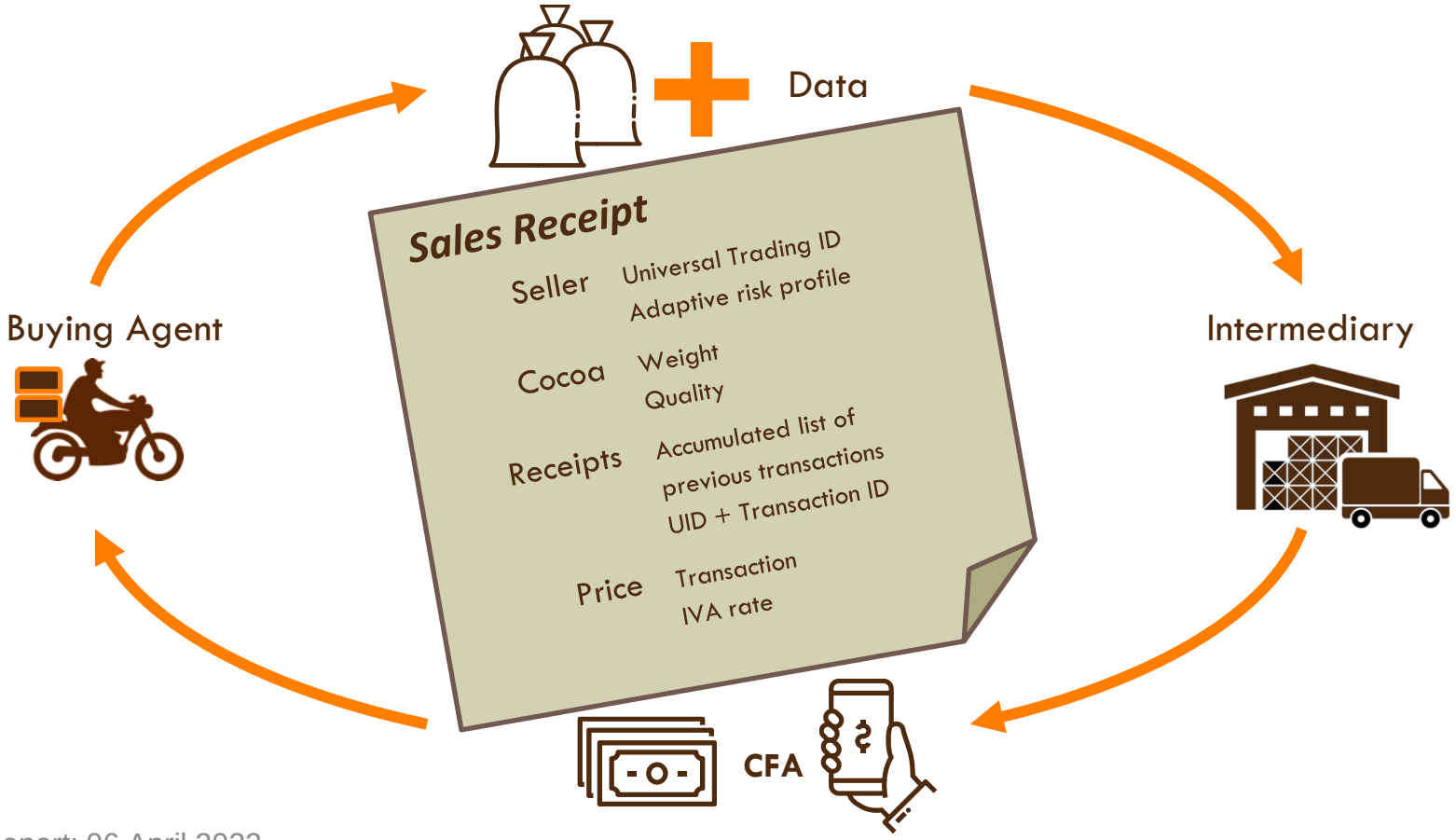
> Link established through transaction receipt



Value Actor Perspective (extract)

As the cocoa moves through the value chain, the previous transactions are referenced

> Broken link = no incentive payment



Traceability data process

Capture	Storage	Transfer & Use	Auditing
Garbage in = Garbage out The quality and standards of 1st mile data capture are essential for the validity of the entire system We urgently need an aligned standard and protocol for harmonised codification (e.g. plot vs farmer as primary codifier)	Data storage plays a crucial role in unlocking the value of the data. Data needs to be stored in a way that is connected, compatible and efficient in order to be productive. Based on the sensitive nature of the data we also need to secure data redundancy (back-ups)	Access right, roles and **legitimate use** rules are essential to securing data viability. In particular the rules for identifiable versus anonymised data needs to be in place to protect farmer's privacy and autonomy rights. This implies rules for transfer of data along the chain of custody and between interoperable traceability solutions / systems	In order to comply with international standards, the quality and validity of the data needs to be subjected to third party auditing for verification. This implies assessing the trustworthiness the robustness of traceability mechanisms, the trustworthiness of captured data and validity of due diligence statement by value chain actors.

The attribution of roles and costs will depend upon the specific design

Transitory costs (captured in the value chain)

3.3.5. Validation Process

The IVA process sets up double accounting principles

- Each party has a copy of the transaction record that can be compared
- The Universal Trading ID creates a red thread for reference and comparison of documents
- By embedding the ID through the value chain we can cross reference for consistency at any point in the chain:
    - Do the value chain actors who are listed claim the same volumes?
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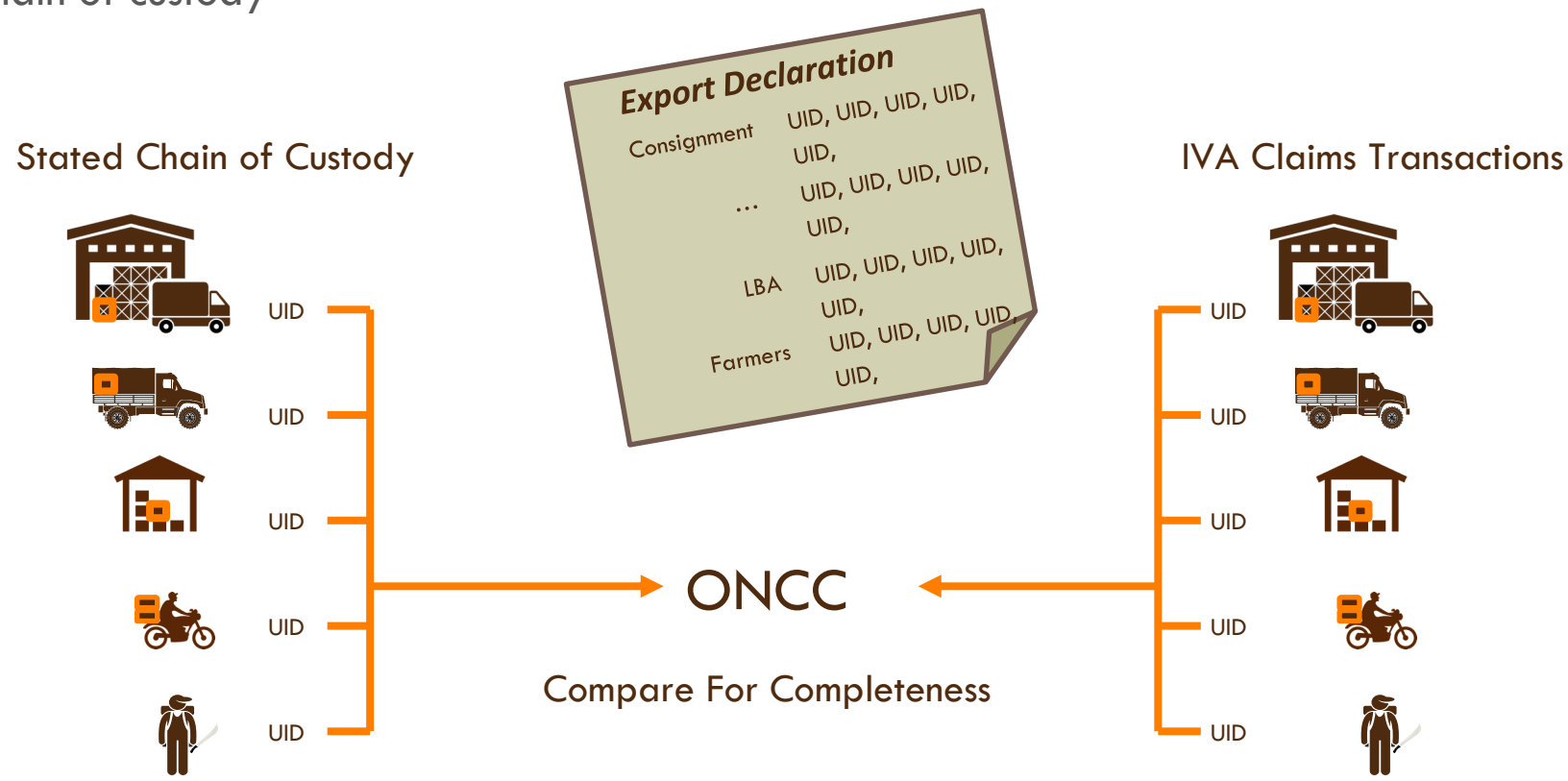
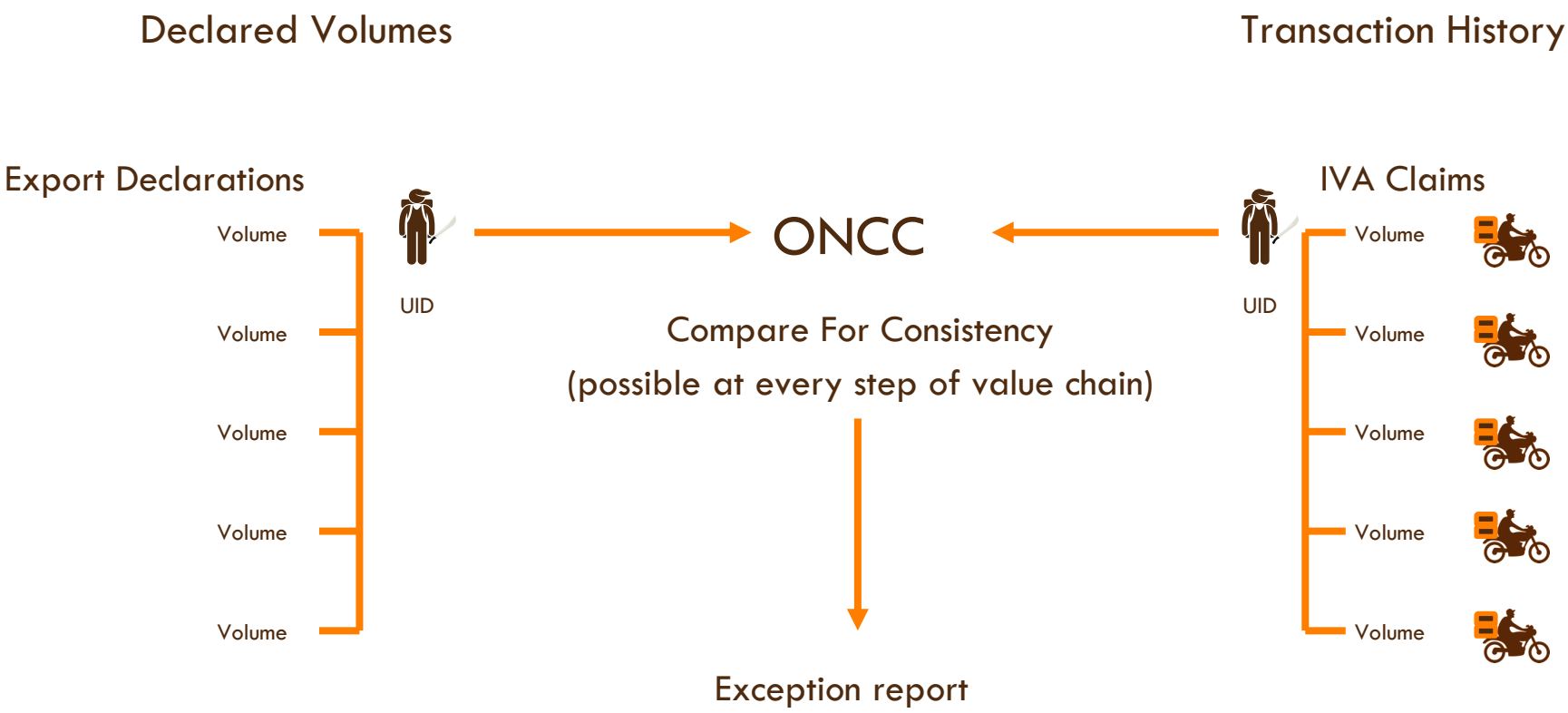
Checking for Completeness

- The port of exit is the key point of control
- All exports must conform to clear documentation standards that include a complete chain of custody



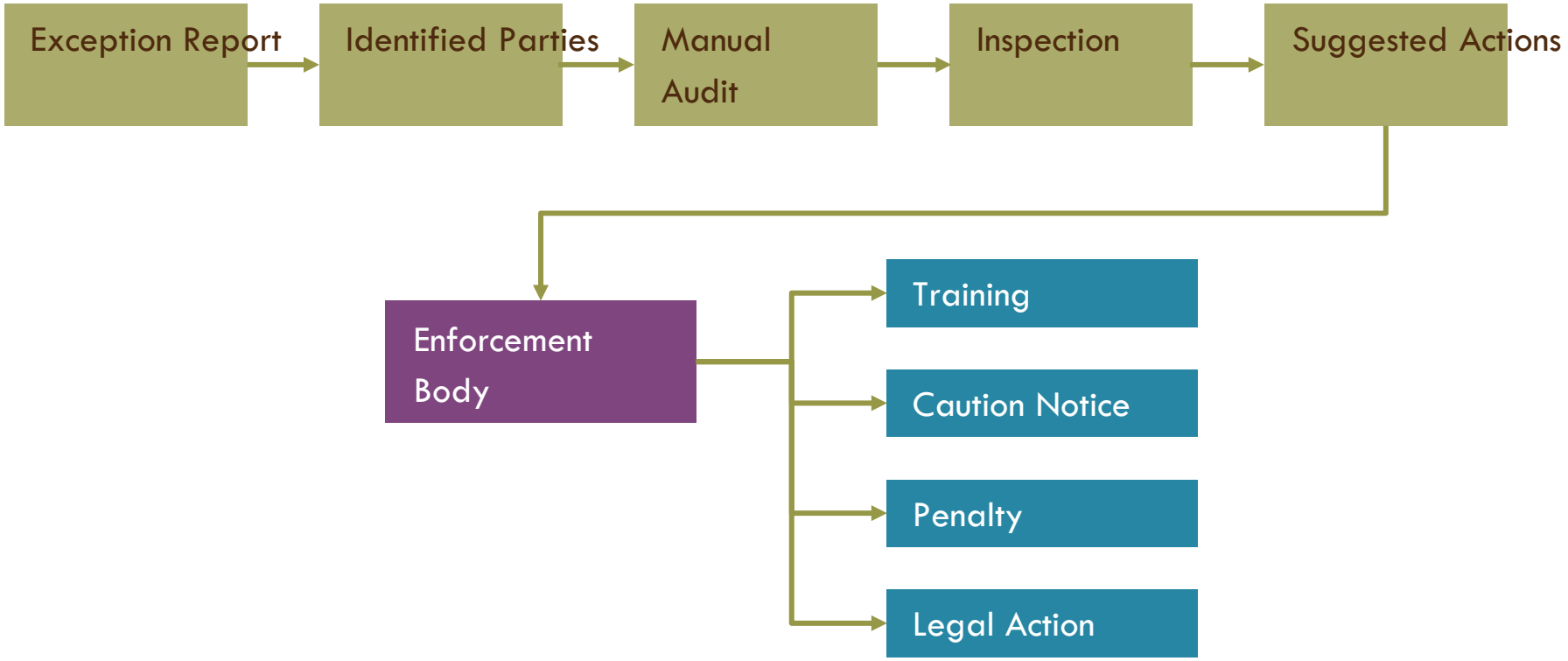
Checking for Consistency

- The declared volumes traded need to be consistent with the production and logistical capacity of the value chain actors



Controlling and Enforcement

- Once inconsistencies have been identified, a process of follow up can be initiated



4. Costs

Cost structure and components

- The specific costs cannot be calculated at this stage
- Process of consultation with stakeholders is required to define exact scope and requirements
- Benchmark costs are however available to guide decision making
- Iterative learning process is suggested to reduce risk and manage scaling costs
- Drastically limit costs by:
  - Leveraging innovative traceability solutions available on the market
  - Fostering (technical and content) Interoperability – international alignment & synergy
  - Innovative geo-referencing of point of harvest when plot mapping is too costly and not fit for purpose
  - Empowering value chain acters and holding them accountable

Cost Components

- The start-up and running costs drivers can be viewed per sub-system:

	Universal Trading ID	Geo-location/anchoring	Digitally Linked Transactions	IVA disbursements	Implementation, Coordination and Control
Enrolment and onboarding	Use of existing vs new systems PPP/hybrid registrations	Integration of existing Development of new /embedded solutions	Establish common framework for interoperability Central oversight and control system	Discussed in dedicated section	Standard setting, quality assurance and KYC
Ongoing Data Capture, Transmission, Analysis and Storage	Integration of online/off line systems National data standards harmonisation	Linking UID with geo-location and national tree cover database Expanding coverage of geo-location systems	Daily reporting and consolidation Fraud protection and control	Quarterly budget reconciliation	Alignment between deployment partners Quality assurance
Information, Education, Communication	National roll-out		Transaction level identification of registered traders	Momentum building Share successes	Monthly updates and internal reporting
Management, Reporting and Analysis	Verification and fraud detection	Alignment with national and international monitoring	Verification and fraud detection	Impact measurement and assessment	Monthly updates and internal reporting

Cost Estimates (Central Government Costs)

- The start-up and running costs drivers can be viewed per sub-system:

	Universal Trading ID	Geo-location/anchoring	Digitally Linked Transactions	IVA disbursements	Implementation, Coordination and Control
Low cost scenario	€800 k	1.5 Million	€2 Million	TBA	€1.8 Million
High cost scenario	€3.5 Million	€6 Million	€8 Million	TBA	€6 Million

Start-up costs range (4 years):
€4.3 Million - €17.5 Million

+

Running costs range 4 years

2022	2023	2024	2025
€ 800k € 2 Million	€ 1 Million € 5.5 Million	€ 2 Million € 7.5 Million	€ 2.3 Million € 8.5 Million

Cost Multipliers

- Detail of plot mapping
- Bespoke ID system
- Costs in private sector
- Total value chain cost versus

Benchmarks

- Cameroon 280 k tonnes
- Ghana 800 k tonnes
  - Cost per farmer
- Ivory Coast (€2.5+ million/year) 21
  - IT system cost
  - Cost per farmer
- Flegt/VPA (Cameroon)
  - €2.7 - €24 / ton*

ivory coast 2154,000 t Ghana 812,000 Cameroon 280,000 cocoa 2018/2019 icco

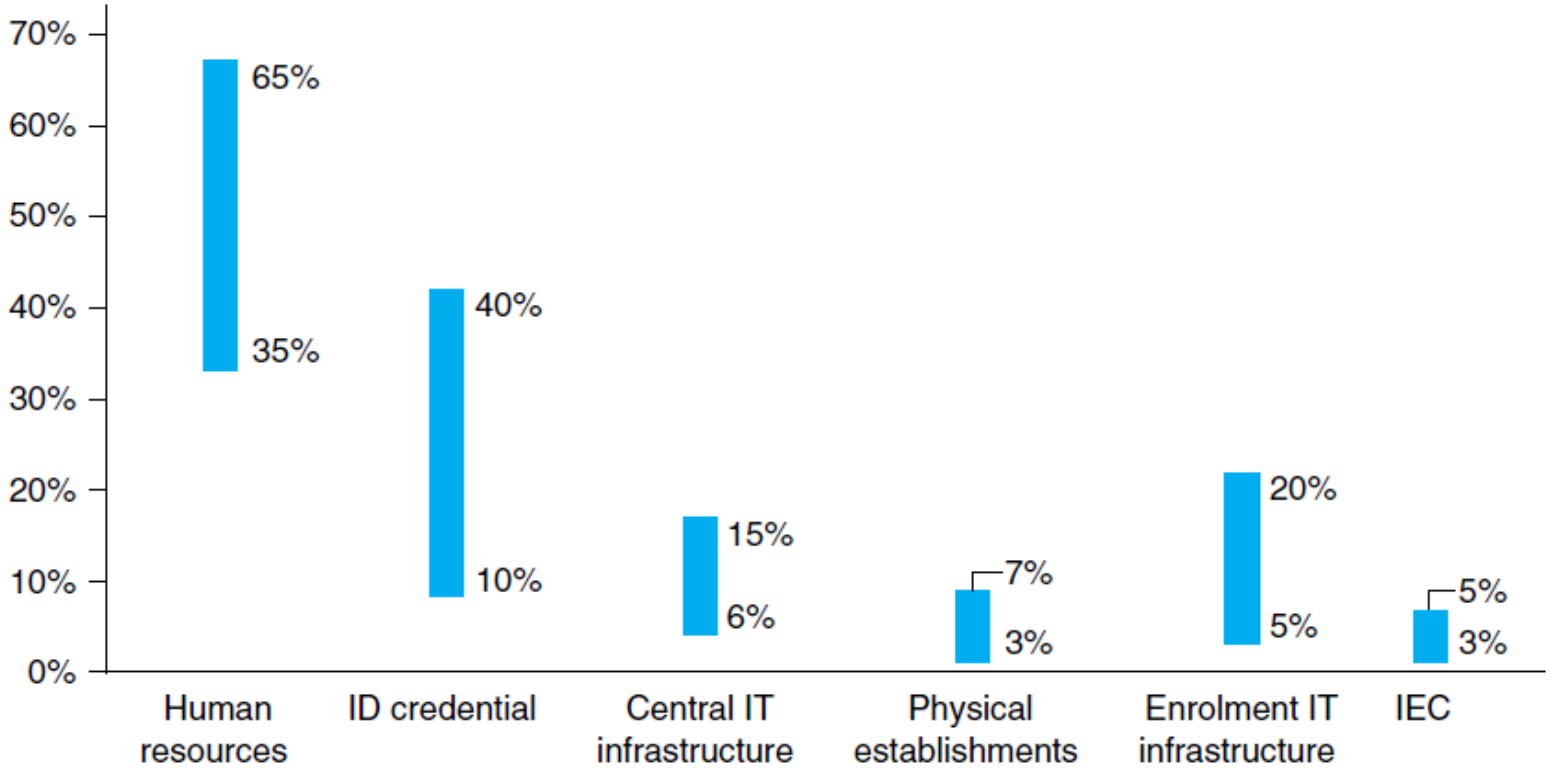
  - An aggregate estimate suggests implementation costs of bEUR 3.2 pa (range bEUR 0.8 – 7.0 pa), of which costs of EUTR implementation for operators placing imported timber on the EU market suggests costs are bEUR 1.9 pa, and bEUR 1.3 pa for domestic operators.

* Wageningen trinomics report

Benchmark cost structure: Electronic ID

Distribution of Costs across Categories for the Start-up Phase:

Source: ID4D World Bank (https://id4d.worldbank.org/Cost-Model)

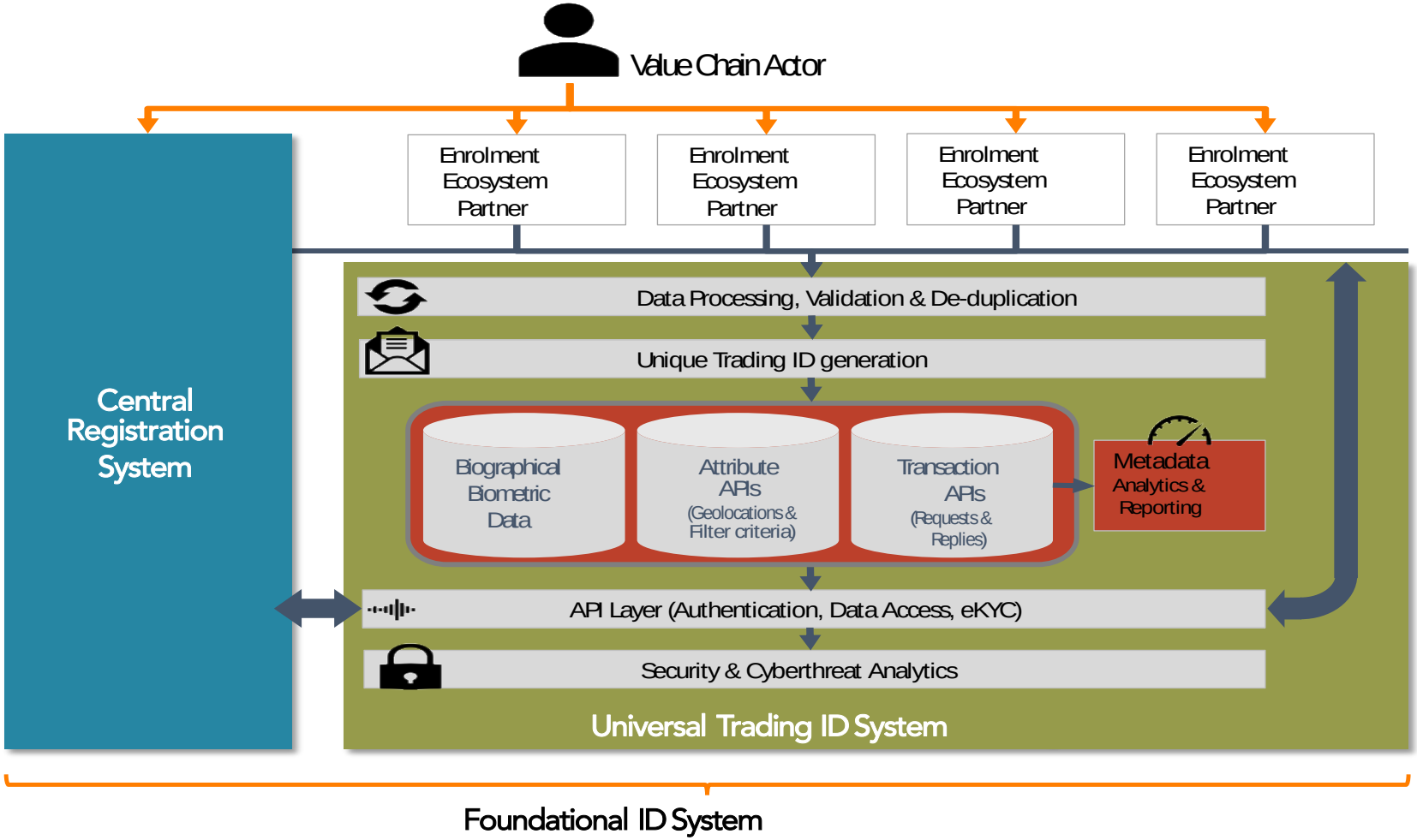


Example Start-up Phase Estonia*: €1.2 million over 18 months**

* 1.3 Million cards in circulation

**https://vm.ee/en/newsletter/estonias-e-residency-program-cost-12-million-euros-18-months

Benchmark IT Infrastructure*



*The World Bank, Nigeria Digital Identification for Development Project (P167183)

Economic & social impacts

Economic

- Increased farm gate price (due to quality & IVA budget)
- More effective tax collection
- Higher farm gate prices
- Levelling playing field (fairer competition, transparent regulation
- Domestic market development
- Improved supplier relationships
- Job creation

- Higher costs farmers
- Higher costs all actors to verify claims
- Higher verification costs – rubber stmap & paper chasing
- Market differentiation

Social

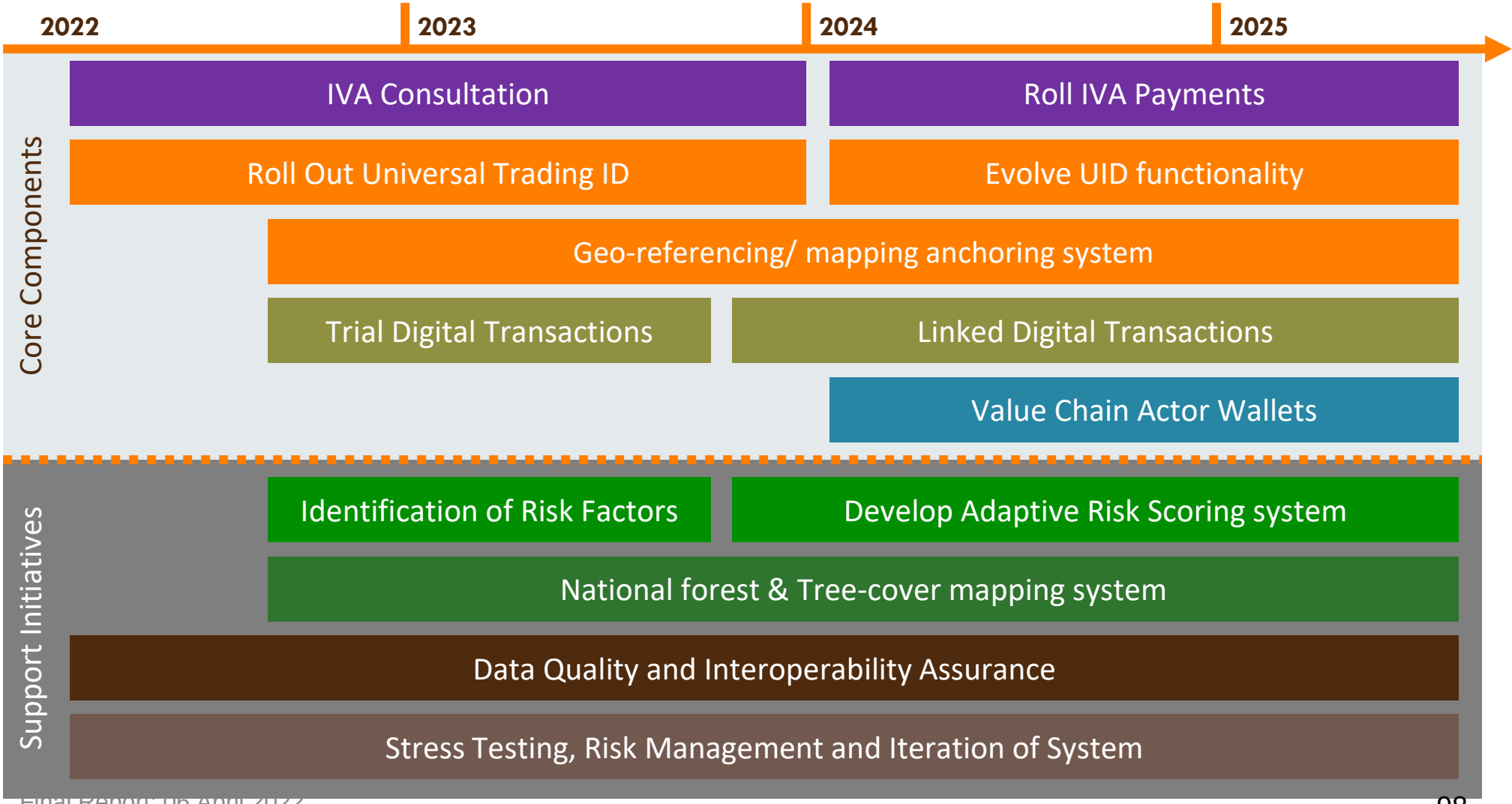
- Small producers & coxeurs formalise
- Supportive enabling environment
- Farm gate prices include externalities
- Technology improvements
- ESG risks explicit and addressed
- Capacity building
- Social inclusion
- Increased deforestation
- Legal trade flows
- Sector/value chain capacity building

- Social exclusion
- Increased complexity cocoa transactions
- Increased burden of information
- Exacerbated power/information imbalance in cocoa chain

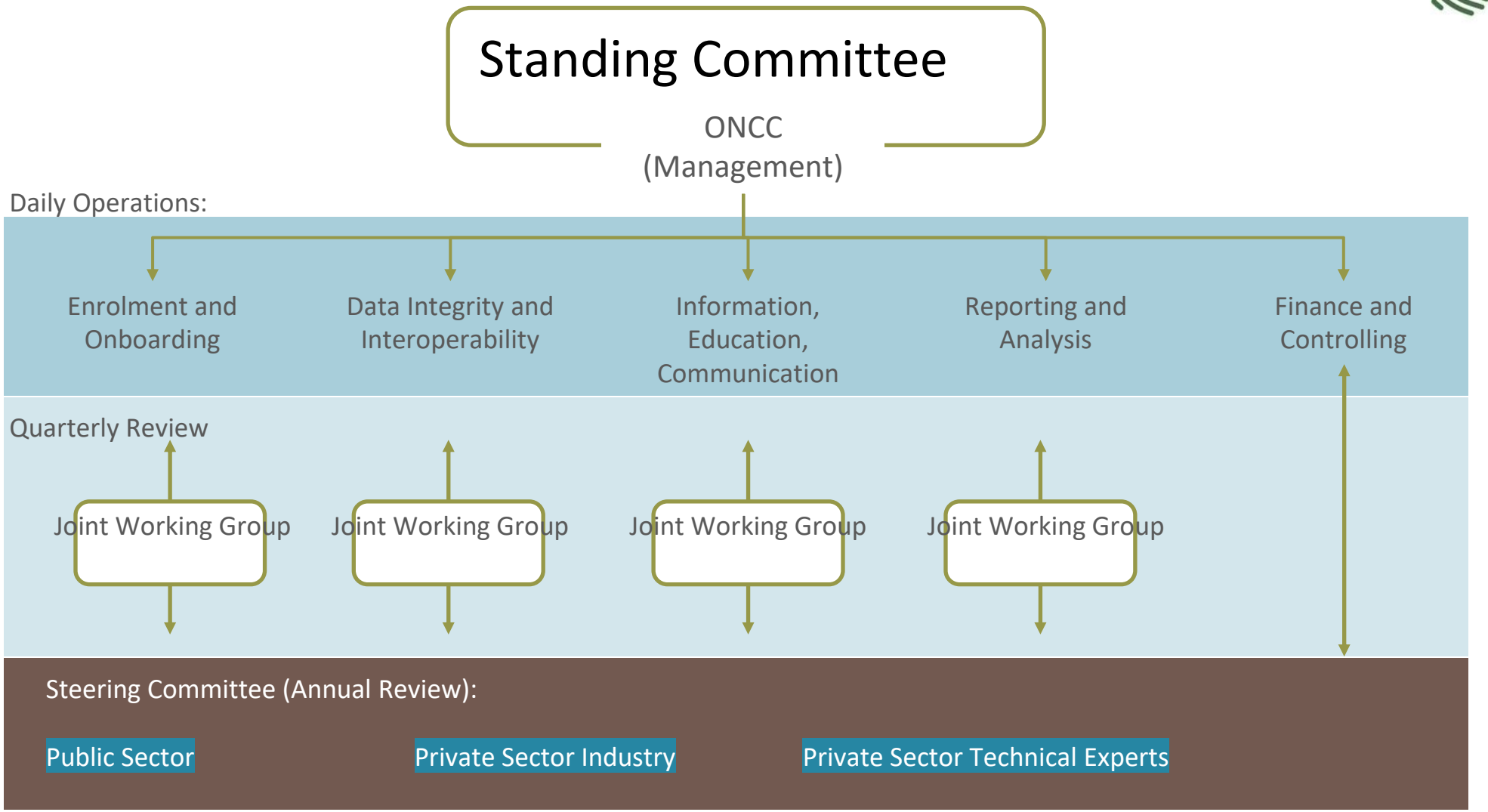
5. Next Steps

Roadmap to Implementation

The following initiatives are required for deployment



Agree Traceability System Governance Structure



Next Steps

We propose the following tasks to support implementation:

- Enable governance and management systems to coordinate activities and strategy between stakeholders (Standing Committee)
- Set up central project management and alignment office for design specification and capacity building
- National validation of design – essential for cost refinement
- Secure funding
- Establish multi-stakeholder review body to agree on incentive priorities and structures
- Establish IEC campaign to promote the validity and trustworthiness of cocoa traceability in Cameroon is recognised, understood and positively received