Global Palm Oil Outlook 2025

Shifting demand, constrained supply and pathways to sustainable palm oil

idh
transforming markets

Purpose

The purpose of the report is to understand and identify pathways and blockages to produce deforestation-free, smallholder-inclusive palm oil from resilient landscapes

01

Clear, evidence-based understanding

IDH and partners have a clear, evidence-based understanding of global production, trade, and consumption trends and can use this to support learning and market engagement.

02

Pathways and blockages identified

Key pathways (and remaining blockages) are identified for deforestation-free, smallholder-inclusive palm oil from resilient landscapes.

03

Clarity on landscape approaches

Clarity on how landscape and jurisdictional approaches can de-risk sourcing areas, enable smallholders to access deforestation-free markets, and address systemic issues.

04

Actionable strategic insights

Stakeholders can act on strategic insights and recommendations that support improved performance, compliance, and collaboration across the sector.

Framing the end-state

A sustainable palm oil sector must deliver across three dimensions simultaneously, not separately

01

Deforestation-free production

No gross loss of natural forest or ecosystem conversion after a cut-off date, with plot-level traceability and credible monitoring.

02

Smallholder inclusion

Smallholders participating in compliant supply chains via accessible pathways, with secure tenure, shared infrastructure, and viable livelihoods.

03

Resilient landscapes

Social, ecological, and economic systems able to absorb shocks while sustaining function and adapting over time.

The interdependencies

The three dimensions are interdependent: each fails without the others. But they cannot be achieved at scale unless procurement practices create consistent commercial incentives for compliant supply. Procurement enablement - buyers rewarding deforestation-free, smallholder-inclusive supply through pricing and sourcing commitments - is the fourth condition that determines whether the other three are achievable.

The report’s argument

Sustainability progress was built under market conditions that are now changing, while persistent coordination failures continue to constrain outcomes at scale

CH 1

The end-state

Markets that enable deforestation-free, smallholder-inclusive palm oil from resilient landscapes.

Shows the definition

CH 2

Market dynamics

Demand is shifting to producer & emerging markets; supply is tightening; trade is contracting.

Shows market conditions moving away from that end-state

CH 3

Sustainability requirements

Sustainability requirements are expanding, but outcomes remain uneven.

Shows sustainability requirements have expanded, but is not delivering full outcomes

CH 4

Inclusion under pressure

Smallholder exclusion is passive and structural. Compliance systems are easier for organised suppliers than for independent smallholders.

Shows that smallholders are being passively excluded

CH 5

Beyond supply chains

Landscape approaches are the most credible mechanism currently available for addressing coordination failures that individual supply-chain interventions cannot solve.

Shows why coordination beyond supply chains is needed

The red thread: Market dynamics are moving away from the conditions sustainability frameworks were built for. Existing requirements have established norms and delivered progress, but outcomes remain uneven and difficult to scale. What is needed now is coordinated action across actors.

The seven findings that frame the palm oil transition

The report asks what is changing in palm oil, why it matters for sustainability and what needs to happen next.

1 Demand is shifting

Demand is shifting away from the markets that drove sustainability progress.

2 A two-tier market is emerging

Regulated and traceable supply is separating from conventional flows.

3 Smallholders are being passively excluded

Inclusion risk is becoming a market-access and supply risk.

4 Commitments outrun verification

Targets are widespread, but credible proof remains limited.

5 Barriers sit beyond supply chains

Legality, land records, plot traceability and finance depend on public systems.

6 Landscape approaches are the coordination mechanism

They operate at the scale where the constraints occur.

7 Resilience depends on productivity

Replanting, yield gaps, disease and climate risks are supply-security issues.

Demand is moving away from sustainability-sensitive markets

Markets that helped drive certification and traceability are shrinking

+39%

Indonesia consumption growth, 2019/20-2024/25

-44%

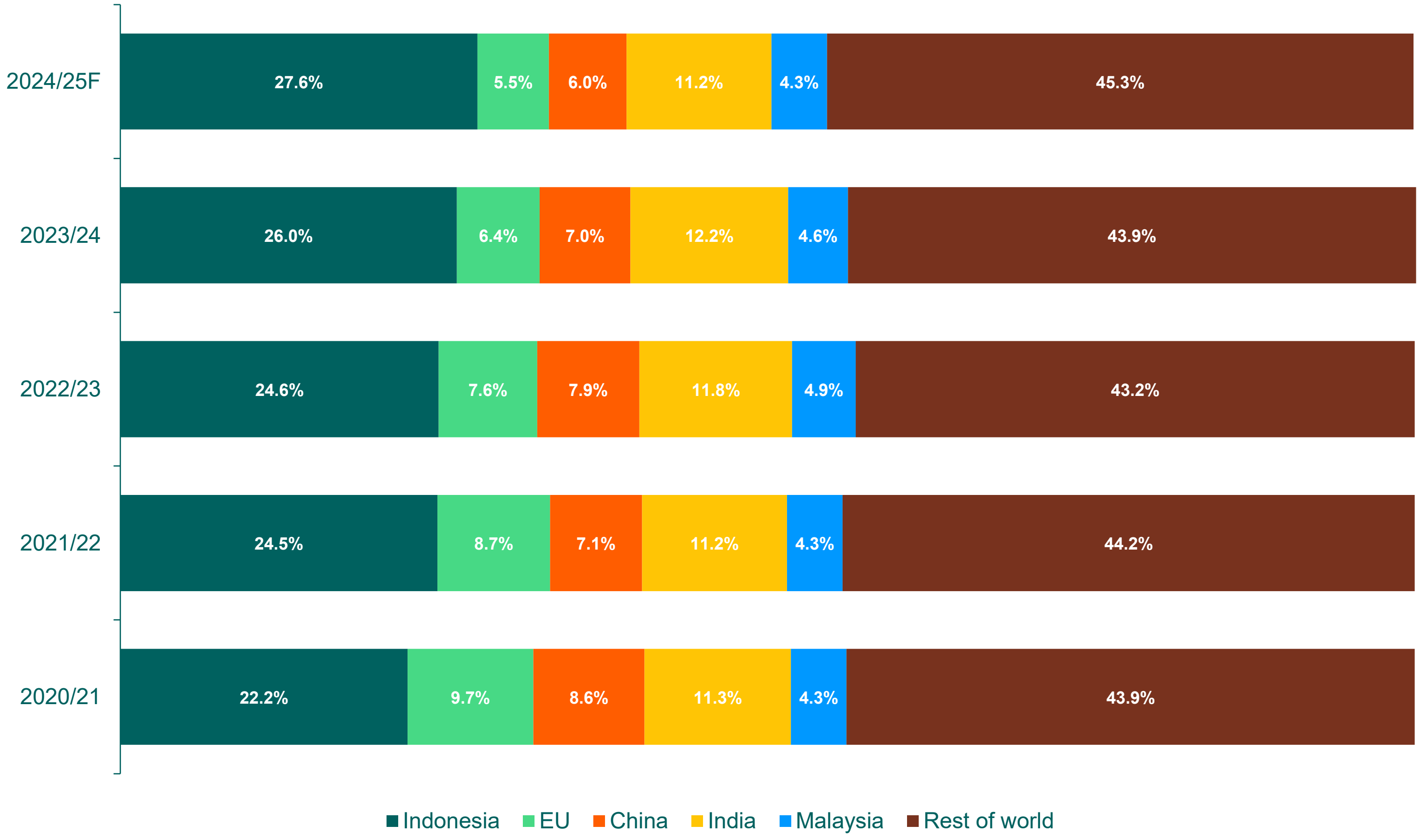
EU consumption decline over the same period

-31%

China consumption decline over the same period

Main takeaway

Future demand growth is concentrated in biodiesel, industrial uses, and major import markets where sustainability plays a more limited role in purchasing decisions.



A two-tier market is emerging

Traceable supply is concentrating in sustainability-sensitive markets, while other volumes flow to price-driven markets

Changing demand patterns

Future growth is concentrated in markets with weaker sustainability incentives

EU consumption
↓ 44%
(2019–2024)

Indonesia biodiesel consumption
↑ 39%
(2019–2024)

India remains largest importer
Low certified uptake
5%

China remains major importer
Low certified uptake
12%

Industrial uses continue to grow
Absorbing increasing volumes

A two-tier market emerges

MARKET 1: REGULATED / SUSTAINABILITY-SENSITIVE

Stronger requirements
EU / EUDR, NDPE policies, certification, corporate commitments

→ **Traceable supply**
Greater transparency and verification

→ **Premium / access market**
Access to sustainability-sensitive buyers

→ **Sustainability outcomes concentrated in a subset of supply chains and markets**

MARKET 2: CONVENTIONAL / PRICE-DRIVEN

Weaker requirements
Limited regulation, low transparency expectations

→ **Conventional supply**
Lower traceability and oversight

→ **Price-driven access**
Competes primarily on price

→ **Excluded volumes redirected to markets with weaker sustainability incentives**

Evidence of divergence

5.2 Mt
certified palm oil sold without a sustainability claim in 2024

CSPKE uptake remains especially weak, showing how certification can be lost as material moves through derivative supply chains.

Implications for outcomes

Deforestation-free production
Risk of deforestation leakage to less regulated markets and frontiers

Smallholder inclusion
Independent smallholders face barriers to meeting requirements in both tiers

Resilient landscapes
Fragmented action limits ability to achieve landscape-level outcomes

Main takeaway

The sustainability mechanisms that drove progress over the past two decades are increasingly concentrated in a shrinking share of global demand. Future progress will depend on whether sustainability incentives can influence the markets driving growth.

The challenge

Adapt sustainability incentives to the markets driving future demand.

Smallholders are being passively excluded

Smallholders are not actively rejected but often struggle to meet the conditions required to participate in certified and traceable supply chains

35-40%

share of global palm oil output produced by smallholders

8%

share of RSPO-certified supply produced by smallholders

95%

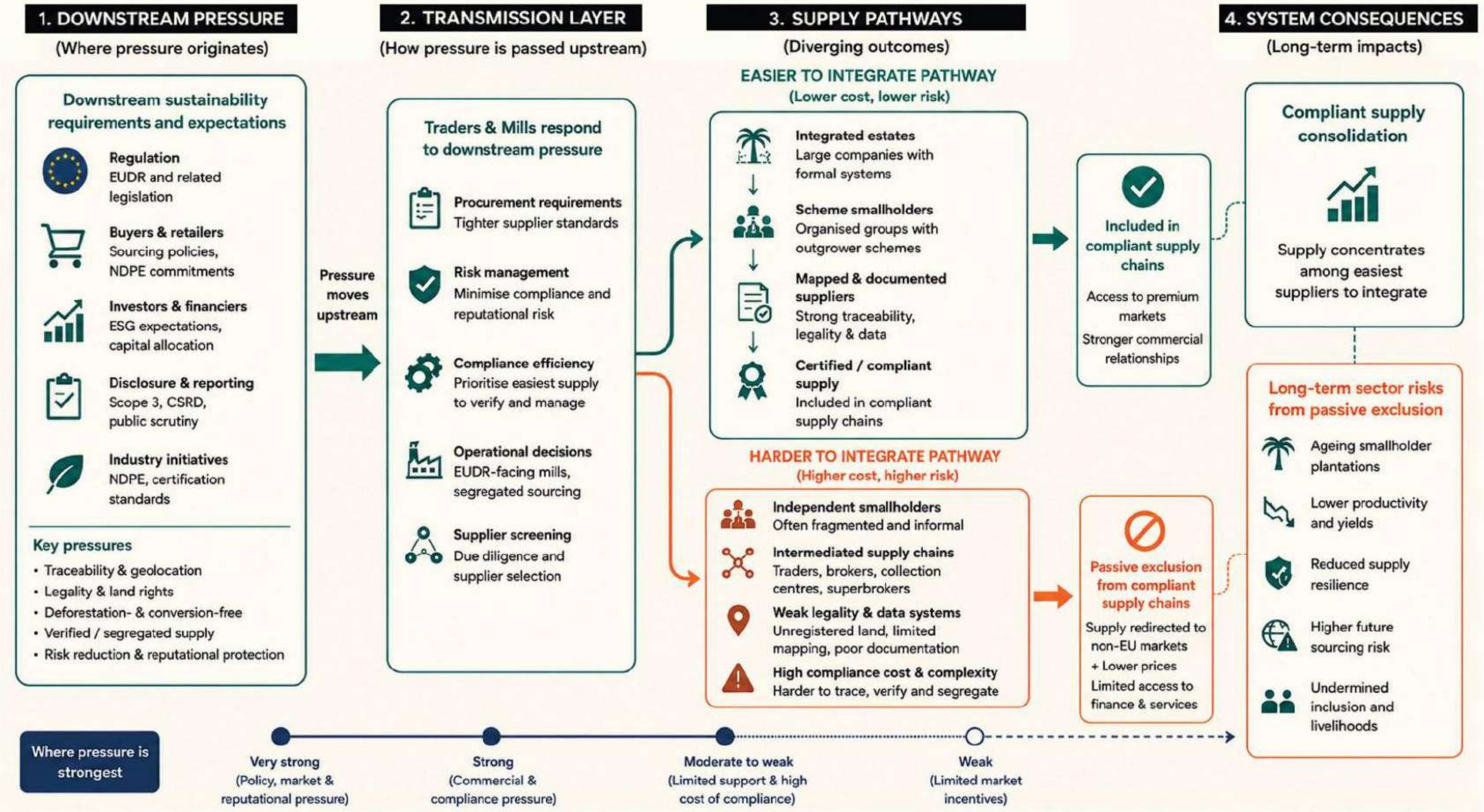
of smallholder suppliers in one EUDR preparedness assessment lacked primary legal documentation required for compliance

Independent smallholders produce an estimated 35-40% of global palm oil, yet account for only 8% of RSPO-certified supply.

As sustainability requirements become more demanding, participation increasingly depends on capabilities, documentation, and support systems that many smallholders do not possess.

The result is a growing gap between smallholders' contribution to production and their participation in sustainability-sensitive markets.

How sustainability pressure moves through the palm oil supply chain and can lead to passive exclusion



Commitments have outpaced credible verification

While sustainability commitments have become widespread, credible verification of outcomes remains limited

Among 427 palm oil companies disclosing through CDP

227 companies reported a DF/DCF target

217 assessed the DF/DCF status of sourced volumes

84 met the report's Full DF/DCF target criteria

84 reported using robust determination methods

36 met the report's Full DF/DCF status criteria

More than half of palm oil companies disclosing through CDP report a deforestation- and conversion-free (DF/DCF) target.

While 227 companies reported a DF/DCF target and 217 assessed the DF/DCF status of sourced volumes, only 84 reported using robust determination methods and just 36 met the report's Full DF/DCF criteria.

Only 8.4% of palm oil companies disclosing through CDP met the report's Full DF/DCF criteria. To qualify, companies must assess the DF/DCF status of sourced volumes, use robust determination methods, and demonstrate that more than 90% of sourced palm oil volumes are verified as deforestation- and conversion-free.

The binding barriers sit outside company control

Land registration, legality systems, plot-level traceability and smallholder finance depend on public systems that companies cannot build independently

1

Land registration

Secure tenure and plot records are incomplete or fragmented.

2

Legality systems

Documentation requirements often do not match smallholder realities.

3

Forest-zone classification

Public zoning can misclassify long-established cultivated land.

4

Geospatial data access

Data sovereignty and access restrictions constrain compliance systems.

5

Smallholder finance

Indonesia's smallholder replanting need is estimated at around USD 700 million per year.

Main takeaway The next phase of sustainability depends as much on public-system capacity as on corporate commitments.

Aceh, Indonesia

A private-sector co-led model delivering measurable outcomes across productivity, income, and forest protection

69-104%
Smallholder productivity increase across pilot districts 2019–2024

2-4×
Smallholder income growth over 2019–2024 baseline

2,645 ha
Annual forest loss reduced vs pre-intervention baseline

4,000+
Smallholders received GAP training and progressing toward certification

EUR 3 million

Blended finance mobilised. ~70% from private sector partners: Unilever, PepsiCo, Musim Mas, Apical. No single company could fund system-level interventions independently.

USD 700 million / year

Estimated annual financing need for independent smallholder replanting in Indonesia alone. EUR 3M is a proof of concept. The scale gap from pilot to system remains the central challenge.

What the programme combined

- Farmer training and productivity support
- Land registration and smallholder organisation
- Deforestation monitoring and geospatial systems
- Multi-stakeholder coordination and governance
- Public-private co-financing

Key private sector actors

- Unilever, PepsiCo, Musim Mas, and Apical co-financed the programme
- Shared investment in landscape-scale infrastructure
- **70%** private funding, complemented by public and donor support
- Model demonstrates commercial participation in shared landscape infrastructure is achievable

Evidence and limitations

- Outcomes reflect integrated interventions, not single actions
- Strong evidence for farm-level outcomes
- Landscape-scale impacts remain difficult to attribute conclusively
- EUR 3M demonstrates proof of concept, not sector-wide transformation
- Aceh provides promising evidence of coordinated implementation potential

Takeaway Aceh shows that coordinated public-private investment can deliver measurable farm-level and forest outcomes simultaneously. The financing model works. The challenge is scale.

Sabah, Malaysia

A government-led model establishing the coordination architecture that enables sustainability at jurisdictional scale

40%
of total Sabah state land committed to forest cover through the Conservation Area Network

100%
of protected and forest areas identified across the entire jurisdiction, a shared spatial framework

Phase 2
NI-SCOPS active since 2018. Phase 1 (2018–2023) complete. Original 2025 full-outcomes target extended.

What Sabah's model delivers

- Common jurisdiction-wide spatial planning and compliance framework
- Clear rules for cultivation, protection, and verification
- Shared HCV assessments and compliance systems
- Reduced due diligence burden for sourcing companies
- Shared compliance infrastructure for smallholders

Programme components

- Training in sustainable and climate-smart production practices
- Support for smallholder certification and formalisation
- Multi-stakeholder governance and coordination platforms
- Geospatial monitoring and traceability systems
- Aligned with Sabah's 100% sustainable palm oil ambition
- Led through government, NGO, and private-sector collaboration

What the Sabah model demonstrates

- Government leadership is as important as private-sector investment
- Coordination systems are outcomes in their own right
- Shared compliance frameworks across multiple producers
- Demonstrates the feasibility of jurisdictional systems
- Highlights government's role as a critical convener

Takeaway Sabah and Aceh are not competing models, they show different entry points to the same coordination challenge. Both depend on actors that no individual company can replace.

Aceh model: Private-sector co-financing and implementation support drive outcomes. EUR 3M demonstrated. Farm-level results measurable.

Sabah model: Government leadership and institutional alignment create shared compliance architecture across the jurisdiction. Implementation ongoing.

LJA engagement is growing but depth, geography, and financing remain concentrated

CDP 2025 disclosure data: rapid growth in landscape participation alongside persistent gaps in implementation maturity and buyer diversity

388
Companies reporting LJA engagement in 2025 (27 in 2022)

55
Palm oil-specific LJA initiatives reported in 2025 (19 in 2022)

10.1%
Meet CDP Full criteria. Most initiatives remain early-stage or partial

25%
Plan to engage in LJAs within the next two years

32.8%
Of palm oil companies now in at least one LJA initiative

Geography: who is financing LJAs

- **~70%** of participating companies are based in Europe, North America, or Japan
- Most initiatives are concentrated in Indonesia and Malaysia
- Limited uptake in Latin America and Africa
- Investment remains linked to traditional sustainability markets
- Participation has yet to reflect future demand centres

What LJA objectives companies report

- **82%** of initiatives support deforestation-free production
- **64%** target smallholder and community benefits
- **62%** focus on biodiversity and ecosystem protection
- **51%** provide smallholder capacity building
- **47%** support traceability collaboration
- **42%** undertake deforestation monitoring
- **76%** of companies participate as funders
- **33%** participate as implementers or conveners

Why only 10.1% meet CDP Full criteria

- Full criteria require: multiple goals, multiple partner types, disclosed area coverage, collective monitoring with a shared external framework
- Many initiatives lack government co-governance and area disclosure
- Less than 40% meet Landscape Practitioner Network core criteria
- LJAs complement, but do not replace, operator-level due diligence

Takeaway LJA participation has grown rapidly, but 90% of initiatives remain below Full implementation maturity, and the buyers financing them are concentrated in markets driving less of future demand growth.

Supply resilience depends on productivity, not only compliance

Ageing trees, disease pressure, replanting needs and climate risk make productivity a sustainability issue.

27%
of Malaysias' mature plantation area contains ageing trees with declining yields

2.6m ha
in Indonesia are over 20 years old

>USD 500m
annual Ganoderma losses across Indonesia and Malaysia

Replanting and better farm management → **Higher yields without expansion** → **Stronger supply security and lower deforestation risk**

Compliance is necessary, but it does not solve the productivity gap.

The largest **untapped supply opportunity is improving yields** on existing smallholder plantations.

Main takeaway
Long-term resilience requires financing and delivery systems that make productivity improvements bankable at scale.

Where leverage now sits

Three areas of convergence and three areas of misalignment

Three areas of convergence

The long-term viability of the smallholder production base is now a shared interest across much of the sector

Sustainability requirements are increasingly shaped not only by premium export markets and international buyer commitments, but also by producing-country policy priorities and domestic market dynamics

There is broad convergence around the importance of shared governance and coordination systems.

Public investment in legal documentation, mapping, registries, traceability, extension support, and geospatial systems benefits nearly every actor as they underpin financing, compliance, productivity improvement, and smallholder inclusion simultaneously

Landscape and jurisdictional approaches are emerging as mechanisms through which these shared interests can be coordinated

Evidence remains uneven, and implementation maturity varies considerably between regions, but these approaches are increasingly being used to coordinate actions that would be difficult for individual actors to deliver independently

Three remaining misalignments

Weak commercial signal

Rising compliance expectations are not consistently matched by higher returns or stable access for independent smallholders.

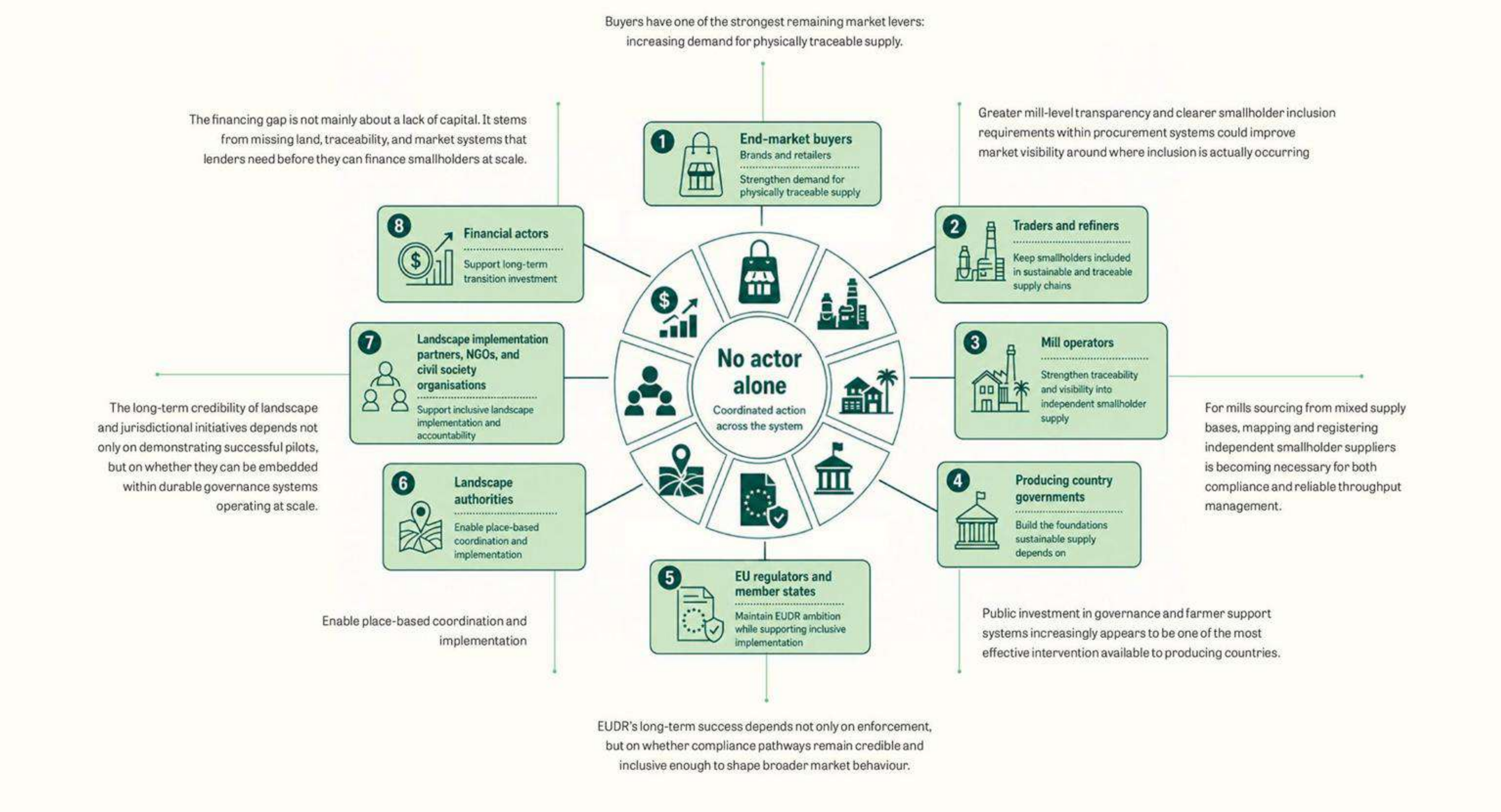
Credits vs physical inclusion

Credits can reward certification but do not by themselves build physically traceable smallholder supply chains.

Two-tier market risk

Demand growth in less sustainability-sensitive markets could fragment sustainability governance.

What each actor needs to do



The challenge is scaling what already works

The report is clear that the sector is not starting from scratch. The missing step is connecting and scaling existing systems.

Public foundations

– Land documentation
– Plot-level registries
– Mapping and legality systems
– Extension and replanting support

Market incentives

– Demand for physical supply
– Premium pass-through
– Smallholder-inclusive sourcing
– Future-growth market alignment

Landscape coordination

– Shared traceability systems
– Multi-stakeholder governance
– Forest protection
– Finance and accountability

Traceability, verification, resilience and inclusion need to become how supply systems function by default, not conditions attached only to premium export markets.


idh
transforming markets