



Sustainable Soya

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Website

www.trst01.com



About TRST01

Global sustainability tech company working at grassroots aimed to build trust in all environmental projects

Sustainability at Grassroots

835K Ha.

Project Area for Sustainability
Compliance Environment

425K

Grassroot beneficiary with 2x
with additional income

50 MN MT

Certified Quantity of Sustainable,
Traceable product across globe

2.42 BN

Value of Traceability Compiled
Inter-country material movement

Our Presence

India (HQ) | Singapore | USA

UAE | Australia

Countries Impacted

India | Vietnam | Laos | Cambodia | Indonesia
Malaysia | China | Cote d'Ivoire



Awards & Recognitions



Global Capabilities

10+ Countries

Providing sustainability
certifications

Commodities covered

Rubber, Soya, Coffee, Cashew,
Cocoa, Vegetables

Tech Innovations

Inhouse products. Highly
qualified & Experienced team

1 Bn Datapoints

Processing everyday, strong
data security

Indian Soya Landscape

~ 13.5 million Ha

Area under soybean
(2024/25, USDA)

~ 12.5 million tonnes

India's soybean production
(2024/25 estimate)

~ 5.5 million

Farmers livelihood
dependent on Soya bean

Indian soybean is a smallholder, rain-fed crop concentrated in central India. India is the world's top-5 producer with expanding acreage but yield ~1.0 t/ha vs global ~2.6 t/ha.

- **Production Leadership in Central India:** India, the world's 5th largest soybean producer with 12.5–13 MMT output, sees over 90% of its crop from Madhya Pradesh, Maharashtra, and Rajasthan.
- **Non-GMO Competitive Advantage:** With no GM food crops approved for cultivation, Indian soy supplies non-GMO meal/food streams sought by premium buyers.
- **Export momentum:** India shipped ~2.1 MMT of soymeal in 2023–24 (+16% YoY); top buyers were Iran, Bangladesh, and Nepal, with niche EU demand for non-GM meal.

Sustainability is Inclusive

Producing soy that regenerates resources, raises farmer incomes, and is provably compliant. India's focus is less on frontier deforestation and more on soil health, rain-fed water efficiency, safe inputs, and auditable supply chains.



Environmental

- **Regenerative agronomy:** reduced/zero till + >30% residue cover, soy-wheat/chickpea rotations, short-window cover crops.
- **Input & water stewardship:** soil-test nutrients + organics (FYM/compost), IPM, in-situ water conservation for rain-fed belts.
- **What to track:** SOC change, water-use productivity (kg grain/m³), Active-ingredient use intensity & harvest loss %.



Social

- **Livelihoods & fairness:** higher net margin/ha, timely payments (≤7–14 days), transparent price discovery via FPO aggregation.
- **Safety & skills:** PPE + safe pesticide handling, training/farmer/season, grievance logging etc.
- **Inclusion & safeguards:** women participation in field teams/FPO boards, onboarding small & marginal farmers, no child/forced labour.



Economy

- **Traceability:** plot geolocation (polygons), lot-level segregation & identity preservation (non-GMO/certified volumes). **Premium Pricing**
- **Certification & audits:** ISSS for scale; RTRS/ProTerra for export chains; surveillance audits
- **Digital and Data-driven Inclusion** – Integrating farmers into digital sustainability ecosystems like dMRV and traceability platforms builds transparency, enabling financial inclusion, carbon credit access, and new income streams

India's home-grown soy sustainability benchmark for smallholder, rain-fed belts. It translates ESG into six principles with clear criteria & indicators, enabling credible audits and buyer-ready evidence on agronomy, legality, and responsible practices.

Principles of ISSS

1. Sustainable Crop Production

Soil & water stewardship; soil-test nutrients, IPM; residue/RT/NT; safe input use.

2. Legal Compliance

Land/title & licenses verified; input/labour laws met; documented compliance.

3. Community & Workers

No child/forced labour; fair wages & hours; PPE/OSH, sanitation, grievance redressal.

4. Conservation & Restoration

Protect natural resources; cut emissions; avoid residue burning; carbon +ve practices.

5. Good Business Practices

Viable farm/processing economics; fair pricing & quality; clean storage/transport risk controls

6. Improvement & Transparency

Annual plans & training; audit CAP closure; traceable, shareable ESGI data.

Methodology Framework ISSS-(Proposed)

Stage	Focus Area	Key Activities / Methodology	Purpose / Outcome	Potential Digital Tools / Systems
A. Baseline & Data Capture	Farm Geo-referencing, Farmer Profiling, Soil & Water Baseline	Map farms using GPS/GeoJSON for deforestation-free verification. Collect farmer socio-economic and production data (landholding, inputs, yield, income). Conduct soil and water quality analysis to establish sustainability baselines.	Establish credible baseline for sustainability measurement and EUDR compliance .	TRST01Chain, GIS-based mapping, GeoJSON datasets, Soil IoT sensors, Farmer Registry Database
B. Sustainable Production Practices	Climate-smart Agriculture, Input Optimization, Resource Efficiency	Promote crop rotation, reduced tillage, and cover cropping. Adopt biological inputs and minimize agrochemicals. Optimize irrigation (drip/sprinkler) and nutrient use for efficiency.	Enhance productivity, soil health, and reduce environmental footprint.	Footprint (ESG Platform), Farm Management Apps, IoT-based irrigation sensors, Agro-advisory dashboards, LCA
C. Traceability & Verification	End-to-End Traceability, Blockchain Integration, Data Validation	Record each transaction from farm to buyer via blockchain. Digitally tag produce batches and maintain audit trails. Enable QR-based certification and supplier verification.	Ensure transparency, traceability, and trust in sustainable soy value chain.	TRST01Chain, QR/Blockchain Ledger, Supply Chain ERP, Certification APIs
D. Monitoring, Reporting & Verification (MRV)	Digital MRV Systems, Satellite & IoT Monitoring, Third-party Audits	Use digital MRV to measure GHG, soil, and water metrics. Apply remote sensing and IoT data for real-time sustainability tracking. Validate results via third-party audits.	Enable accurate sustainability reporting and continuous improvement.	dMRV System (TRST01), Satellite Remote Sensing, IoT Soil & Climate Sensors, ESG Reporting Dashboards

Key Indicators Framework for ISSS

Dimension	Focus Area	Indicator / Metric	Measurement Methodology	Potential Digital Tools / Systems
Environmental	Deforestation & Land Use	% area verified as non-deforested	Satellite / GIS analysis using GeoJSON farm data	TRST01Chain, GIS Tools, Remote Sensing
	GHG Emissions Reduction	CO ₂ equivalent per ton of soy produced	Digital MRV + Life Cycle Assessment (LCA)	dMRV System, Carbon Calculators, IoT Sensors
	Water Use Efficiency	Liters of water per kg of soy produced	IoT-based field data, water meters	IoT Irrigation Monitors, Footprint Platform
	Soil Health Improvement	% increase in soil organic carbon, nutrient balance	Annual soil testing and remote sensing	Soil IoT Sensors, Lab-linked Data Portal
	Biodiversity Conservation	% of buffer zones and native vegetation maintained	GIS mapping and farm audits	GIS Layers, Biodiversity Index Tools
Social	Farmer Livelihood	Average income increase per year	Annual income and yield tracking	Farmer Registry, Digital Payment Records
	Gender Inclusion	% of women farmers engaged in sustainable soy	Field data and farmer profiling	Footprint Social Metrics, Farmer Registry Database
	Training & Capacity Building	Number of farmers trained in sustainable practices	Attendance logs, mobile training data	Learning Management Systems, Digital Training Apps
	Fair Labor & Safety	Compliance with labor norms and fair wage verification	Field audits and digital reporting	Audit App, Footprint Compliance Tracker
Economic	Yield Improvement	% increase in productivity (MT/ha)	Field-level crop data monitoring	Farm Apps, IoT Yield Sensors
	Market Access	Volume sold through certified or premium channels	Trade and export records	TRST01Chain, Trade Traceability Dashboards
	Carbon Revenue Generation	Income earned from carbon credits	Verified registry and dMRV	dMRV System, Carbon Credit Registry

Expected Outcomes

- **Economic:** **15–25%** higher income for sustainable soy farmers through yield, premium pricing, and carbon credits.
- **Environmental:** Verified non-deforestation production, 20% water efficiency improvement, measurable GHG reduction.
- **Social:** Increased participation of women and smallholders, enhanced financial inclusion.
- **Governance:** Digital transparency, EUDR-ready traceability, and real-time sustainability reporting.

Implementation Alignment

- **SDG Alignment:** **SDG 1** (No Poverty), **SDG 2** (Zero Hunger), **SDG 5** (Gender Equality), **SDG 12** (Responsible Consumption), **SDG 13** (Climate Action), **SDG 15** (Life on Land).
- **Policy Integration:** Aligned with India's National Mission on Sustainable Agriculture (NMSA) and FAO's Sustainable Food Systems Framework.
- **Technology Backbone:** Powered by TRST01's suite **TRST01Chain** (traceability), **Footprint** (ESG management), and **dMRV** (data-driven verification).

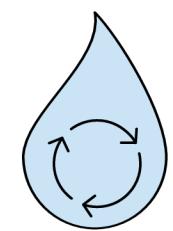
Regenerative Agri for Soya

A systems approach that rebuilds natural capital and farmer prosperity—aiming to leave the land and community better each season, not just “less harmed.”



Improve soil health — build organic matter, strengthen structure, reduce erosion.

Adding organic matter (compost/FYM), retaining residues/mulching, reducing tillage



Enhance water resilience — better infiltration, moisture retention, and drought tolerance.

Conserving ground cover, shaping bunds/contours, harvesting rainwater (ponds/pits)



Support biodiversity — healthier field and landscape ecology, natural pest balance.

Diversifying rotations/intercrops, planting hedgerows/trees, adopting IPM/biocontrols



Strengthen livelihoods & equity — more stable incomes, safer work, inclusive participation.

Aggregating via FPOs, improving drying/storage & grading, training and using PPE

Why it Matters ?



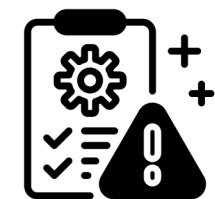
Rising global demand – Retailers, feed & food brands are shifting to traceable, deforestation-free, non-GMO soy with ESG disclosure.



Premium & market access – Better entry to EU/US food-grade (e.g., lecithin) and buyers that pay for certified & verified supply.



Regulatory compliance – Meets regimes (EU deforestation rules, Germany's LkSG, UK Environment Act) and aligns with buyer responsible-soy policies.



Supply & brand risk reduction – Fewer shipment disputes, audit findings, and reputational risks; stronger buyer confidence.



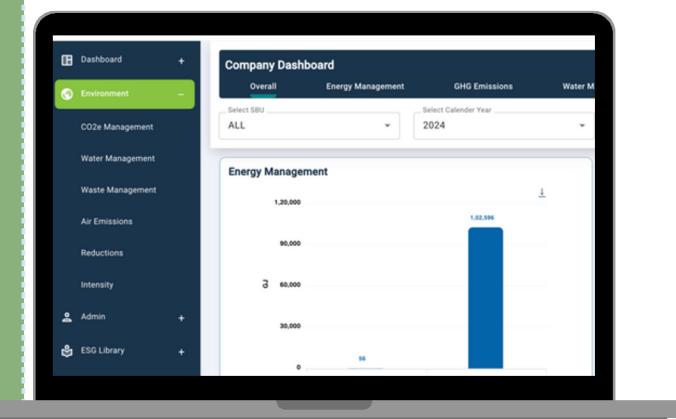
Finance & incentives – Improves eligibility for sustainability-linked finance, green procurement scorecards, and long-term contracts.

Our Solutions



Footprint Smart Tool

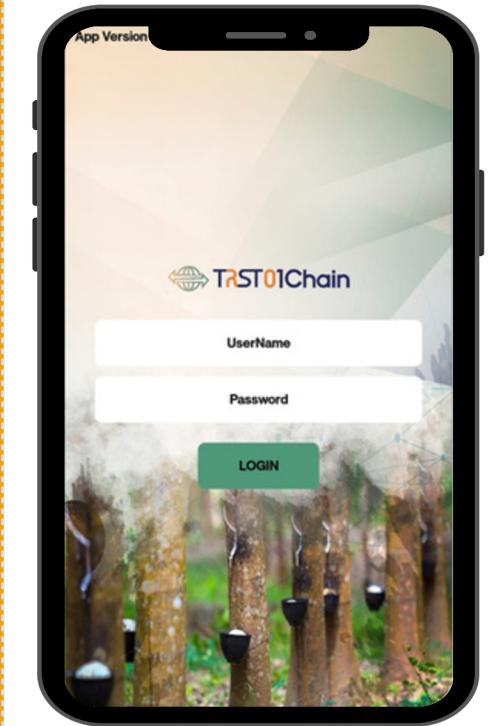
Automated ESG Reporting Tool – **FOOTPRINT**. With risk adjusted scoring module, Dynamic dashboards, multi-user access



Compatible with global frameworks like BSR, GRI, TCFD, CSRD, SASB, CDP, and SDGs, and features automated calculators for Scope 1, 2, and 3 emissions across categories.

Powerful Traceability tool

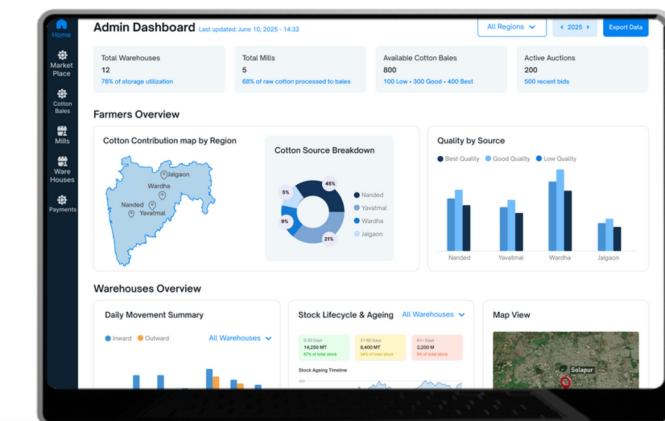
Enabled with End to End seed to plate traceability in agri-supply chains



Compatible with Globally acceptable Traceability principles of WTO, FAO, Codex Alimentarius, ISO 22005:2007, EUDR

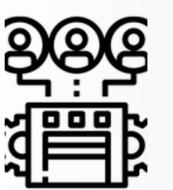
Measurement Reporting Verification

Tool for audit-ready measurement & reporting across carbon sequestration, methane abatement, and sustainability programs —turning sensor/field/satellite data into verifiable evidence.



IoT + remote sensing, geotagged mobile capture, methods engine (reductions/removals), live dashboards, API export, audit-ready reports, SDG metrics.

Solutions CONVERGENCE



Plot Mapping
KYC, Risk & Governance



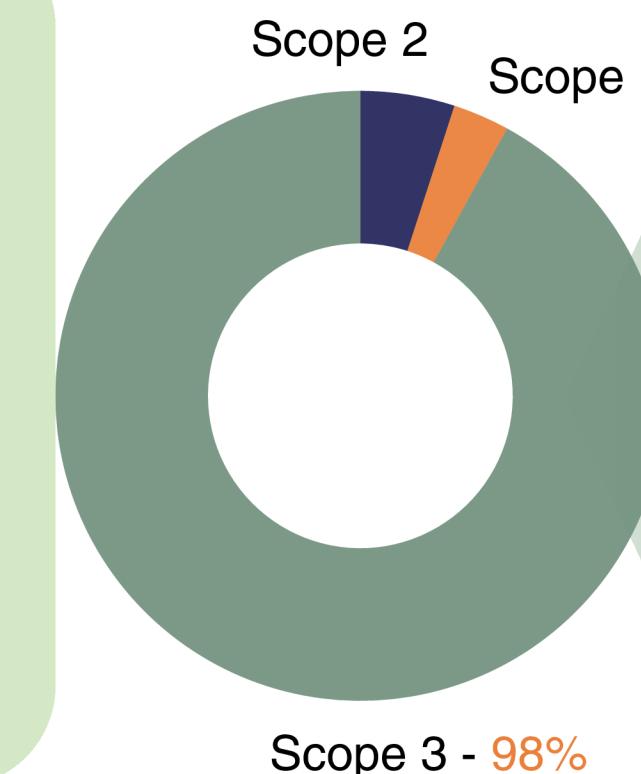
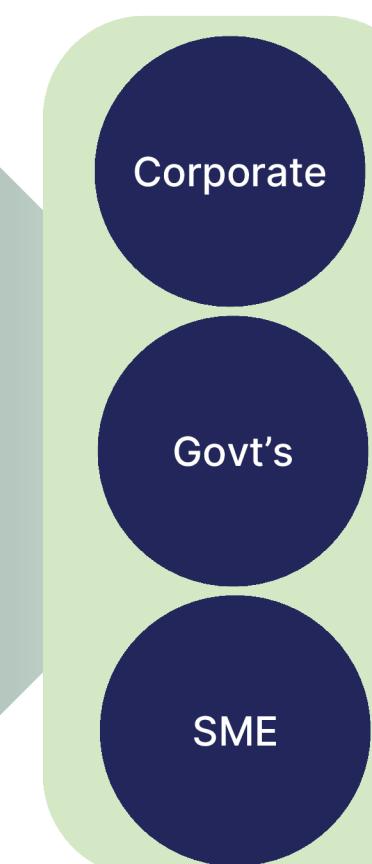
Change of State Reporting
Carbon Footprint



Sustainable Sourcing / production
Sustainable practices in sourcing & manufacturing



End to End Traceability
Blockchain enabled traceability platform



TRST01 dMRV

Climate
Impact

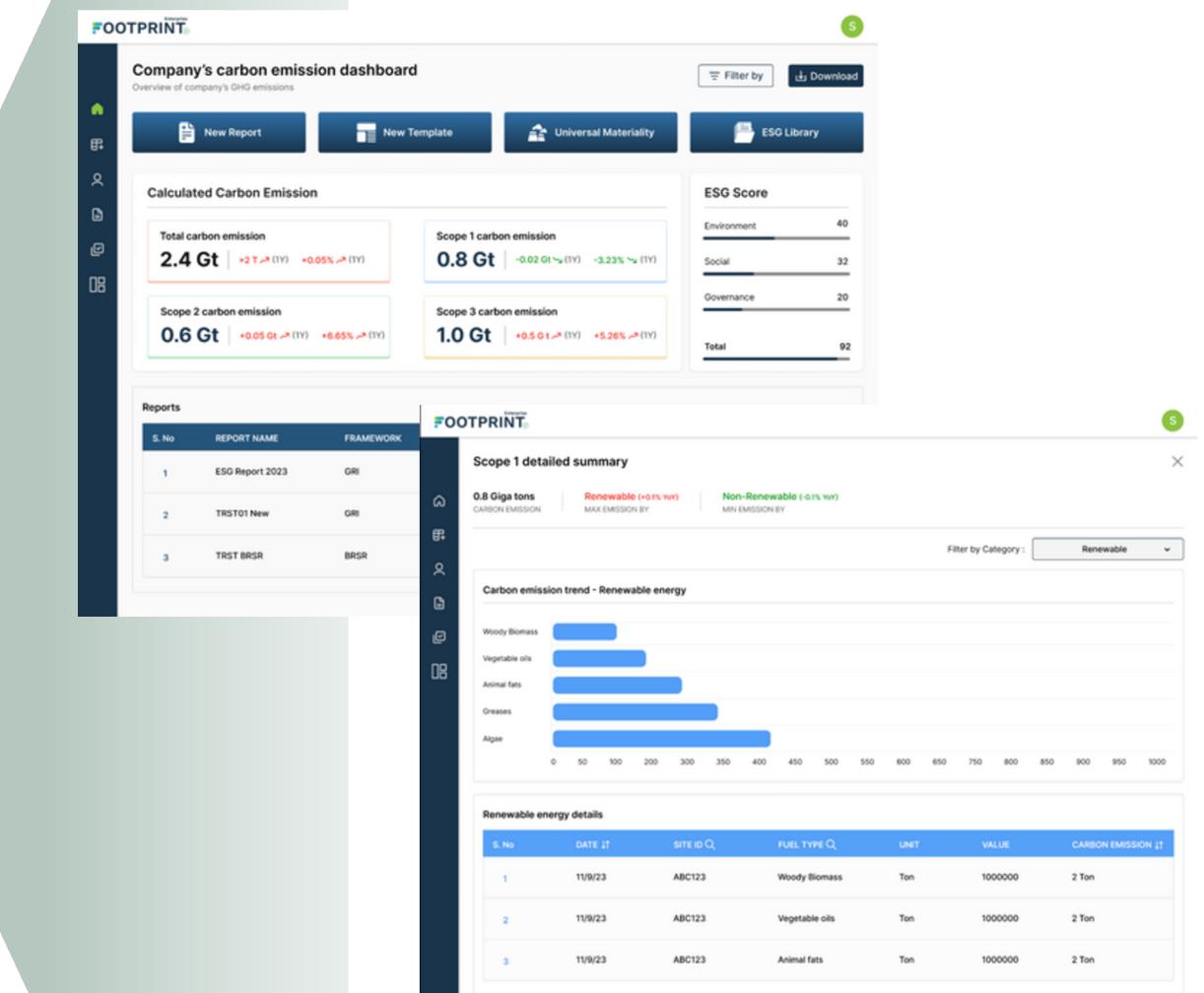
Carbon Credits

SDG Goals
Measurement

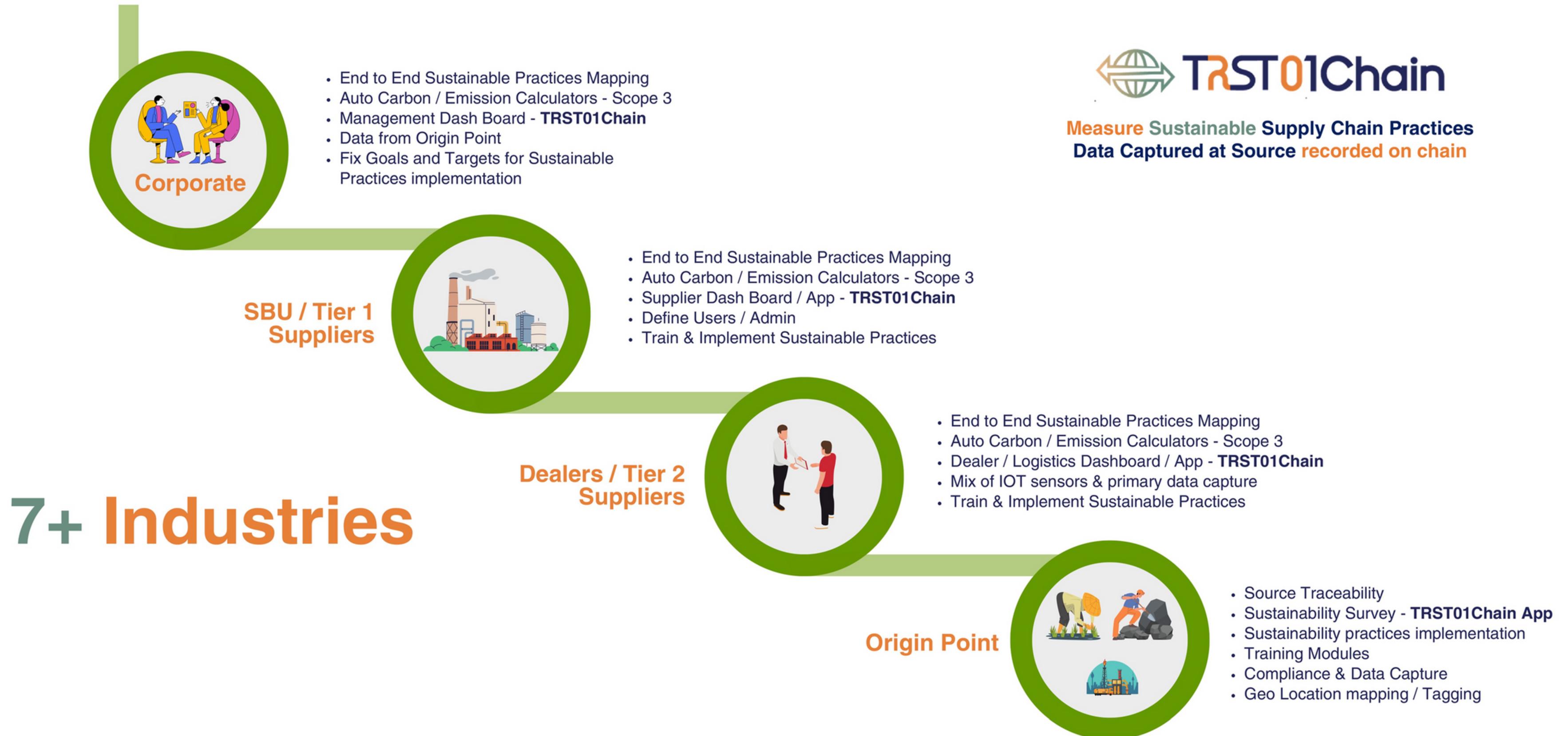


ESG Reporting

Standard / Framework based reporting



Sustainable Supply Chain

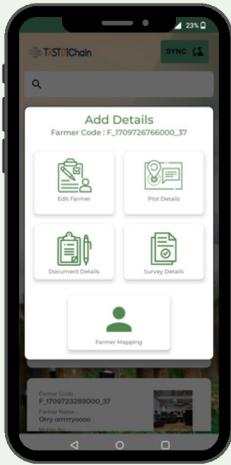


Our Approach - EUDR

Supply Chain Data

Traceability Data

1. Agent/ Mandi/ Processor to Create Farmer Profile



- Farmer Name
- Khasra number
- Adhaar Copy

2. Data Extraction from Government Database (MP - Bhulekh, MAHA Bhulekh)

Khasra number



- Plot Polygon file
- Land Legality Document (Khasra Doc)
- Farm details (area etc.)

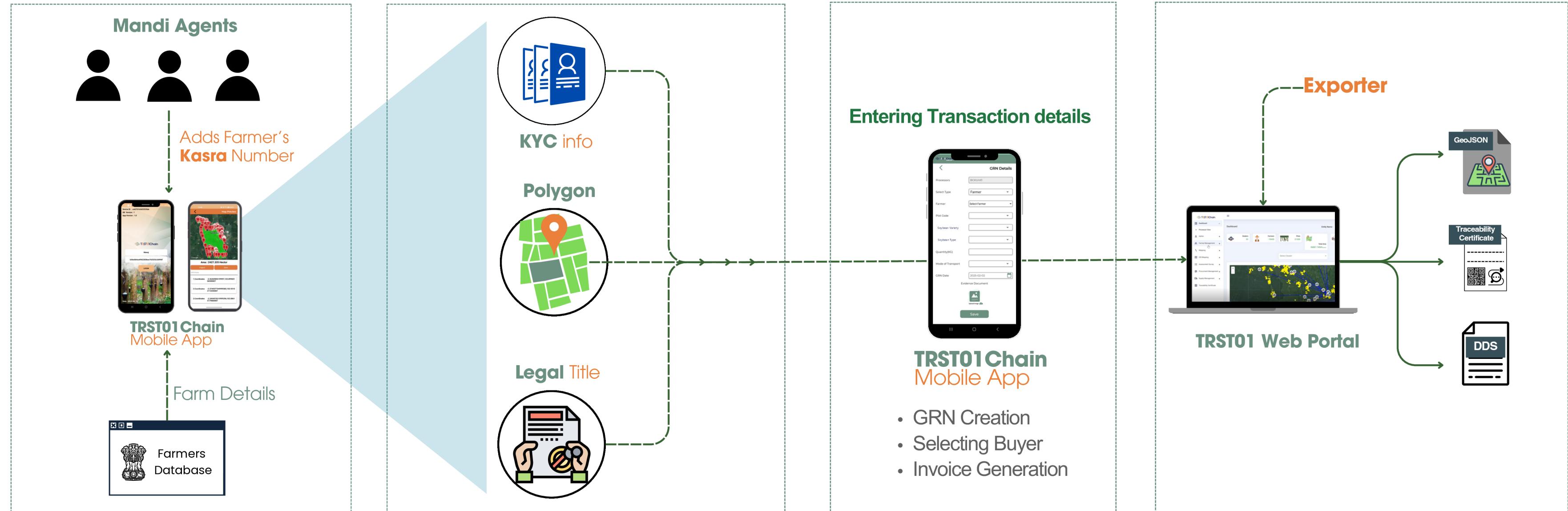
3. EUDR Compliant Profiles

- Deforestation Analysis of Plots
- Verified Land Ownership
- Mapped Polygon (GeoJSON)
- Farmer Identity & Aadhaar Linked for Legality

Farmers → Traders	Goods tagged to mapped farmer and recorded with GRNs
Traders → Mandis	Digital transfer logs created, maintaining batch identity
Mandis → Processors	Batch is segregated and processed separately with traceability maintained
Processors → Exporters	DDS and traceability certificates auto-generated with EUIS compliant polygon data & DDS



Process Flow



Our Impact & Expertise

835,000+ Ha

Largest coverage of Sustainable and deforestation free Farm Lands

425,000+

Farmers onboarded on TRST01Chain platform

50 Mn Tons

of Products flown through the system including EUDR shipments

Government Partnerships



RUBBER BOARD,
GOVERNMENT OF INDIA



PDS, GOVERNMENT
OF ODISHA



GCC, GOVERNMENT
OF TELANGANA



TELANGANA STATE
AGRI UNIVERSITY

ESG Monitoring and Reporting



SATO®



Global Exporters Rubber/Coffee/Cocoa/Tyres



BCK INTERMARK



HANKOOK
driving emotion



HOCK HIN

ASCENSO
never stop rising

THR

CP EXPORTS

SOCATRA

apollo
TYRES



Tower Commodities

CEAT



NEW AMBADI ESTATES

TRST01

TRUST · TRANSPARENCY · TRACEABILITY



SOPA

Thank You !

Connect with us

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