Traceability-as-a-Service: GTM Strategy

Enabling transparency, trust, and financial inclusion through immutable blockchain technologies.

Prepared by: Sam Lambert & Iffat Anjum
Prepared for: UNDP Alt Fin Lab and Emurgo Labs

1. Executive Summary

This document presents a **Go-To-Market (GTM) Strategy** for the design, piloting, and scaling of a Software-as-a-Service (SaaS) platform delivering **Blockchain-Traceability-as-a-Service (TaaS)** for digital traceability and e-trace solutions.

The platform builds on **Winter Protocol APIs**, first developed through the UNDP SDG Accelerator Program, and enables traceability providers to immutably record supply chain events on-chain, link digital identities, and open pathways to financial services such as credit, insurance, and trade finance.

The GTM strategy focuses on three priorities:

- **Developing the SaaS MVP** – building the core infrastructure of a scalable, multi-tenant API service.
- **Piloting with SERA Bangladesh** – integrating and testing the platform within existing traceability workflows for winter vegetable and fruit farmers, cooperatives, and exporters.
- **Scaling across markets** – preparing for adoption in other UNDP Bangladesh initiatives and eventual replication across global UNDP offices and value chains.

This GTM strategy outlines how the platform will be **positioned**, how **early adopters will be acquired**, and how the solution will **scale sustainably**. Specifically, it covers:

- **Market Penetration** – starting with niche pilots before expanding regionally and globally.
- **Branding & User Acquisition** – leveraging UNDP networks, donor showcases, and impact-driven storytelling.
- **Sustainability Roadmap** – ensuring long-term adoption through institutional partnerships and replication across UNDP offices.

Together, these elements position the Traceability-as-a-Service platform not only as a technical innovation, but as a scalable, sustainable, and market-ready solution for strengthening transparency, compliance, and financial inclusion in agricultural supply chains.

2. Go To Market Strategy

2.1 Purpose

The Go-to-Market (GTM) strategy is a **core document** for guiding post-accelerator growth of the Blockchain-Traceability-as-a-Service (TaaS) platform. It sets out how the solution will be positioned in the market, how early adopters will be engaged, and how it will transition from pilot to scaled implementation. The strategy ensures that the platform moves beyond technical prototyping and becomes a market-ready, sustainable product with measurable impact across agricultural value chains.

2.2 Problem Statement

A key challenge in Bangladesh — and in many other emerging markets — is the **readiness and usability of blockchain technology**. While e-trace solutions are being actively developed, most remain **cloud-first and not blockchain-native**, which creates several barriers:

- **Complexity of integration:** Blockchain adoption is often perceived as overly technical, requiring expertise in wallets, smart contracts, and transaction management that local platforms typically lack.

- **Limited trust and transparency:** Without immutable records, existing systems cannot provide full assurance to regulators, financiers, or international buyers.

- **Weak interoperability:** Cloud-only platforms such as SERA face long-term limitations in aligning with global standards and ensuring data portability across markets.

The Blockchain-Traceability-as-a-Service platform addresses these challenges by offering a **developer-friendly API layer** that abstracts away blockchain complexity. This enables traceability providers to anchor data immutably, link digital identities, and build transparent and interoperable supply chain records — all without needing in-house blockchain expertise.

2.3 Target Customer Segments

The platform is designed for multiple customer groups across the traceability ecosystem:

- **Primary Customers**

    - **Traceability providers** such as SERA Bangladesh, which require blockchain-backed features without building their own infrastructure.

    - **Exporters and processors** that must prove compliance with EUDR, FDA, and other international standards to maintain market access.

    - **Smallholder farmers and cooperatives** whose production data will be immutably recorded and linked to digital identities, creating opportunities for finance and subsidies in the future (once sufficient data thresholds are met).

- **Secondary Customers**

    - **Government agencies** (e.g., Bangladesh Customs, Ministry of Agriculture) that require verifiable datasets for oversight, compliance, and reporting.

    - **Financial institutions** (banks, insurers, microfinance providers) that benefit from reliable datasets to design credit and risk products.

    - **Donor agencies and international buyers** seeking accountability and traceability across global supply chains.

By addressing the needs of both grassroots users and institutional stakeholders, the platform ensures adoption at multiple levels of the value chain.

2.4 Unique Value Proposition (UVP)

The Blockchain-TaaS platform provides a **subscription-based API service** that makes blockchain functionality accessible, affordable, and scalable.

- **For Traceability Providers:** Simple APIs eliminate the cost and complexity of developing blockchain infrastructure.

- **For Exporters:** Verifiable compliance reporting and data strengthens credibility with EU and US markets.

- **For Farmers and Cooperatives:** Immutable records linked to digital credentials that, over time and with sufficient data history, can support access to credit, insurance, and subsidies.

- **For Policymakers and Donors:** Real-time access to trusted datasets (querying from on-chain data) strengthens governance, oversight, and donor confidence.

2.5 Positioning Statement

For traceability platforms, exporters, and institutions, the Blockchain-Traceability-as-a-Service platform provides a **secure and scalable API layer** that makes traceability data verifiable, transparent, and interoperable — enabling compliance and financial access without requiring blockchain expertise.

2.6 Acquisition Channels

User and partner acquisition will begin with **onboarding existing e-trace solutions**, starting in Bangladesh and then expanding into other markets. Most traceability platforms are currently cloud-first and not blockchain-native, which limits their ability to provide immutability, trust, and interoperability. By offering a simple API layer, the TaaS platform creates a low-barrier path for these systems to adopt blockchain functionality without changing their core workflows.

The acquisition strategy will therefore follow two primary channels:

- **E-trace Platform Onboarding**
    - The first proof point will be achieved through integration with **SERA Bangladesh**, where the platform will be tested in live workflows with winter vegetable and fruit farmers, cooperatives, and exporters.
    - Following this, the strategy is to expand to additional traceability providers in Bangladesh across fisheries, shrimp, and other value chains supported by UNDP.
    - Longer term, the model will be replicated across other markets where blockchain has already been identified as a strategic enabler in national digital transformation agendas.
- **Donor and Development Partner Networks**
    - Donors and development agencies represent another major channel, as there are hundreds of traceability projects already underway globally, most of which are cloud-first and face the same limitations seen in Bangladesh.
    - By positioning the TaaS platform as a “plug-and-play” blockchain layer for these projects, we can scale adoption rapidly through donor-supported initiatives.
    - Targeting regions where blockchain has a clear policy mandate or is part of a future technology stack (e.g., Africa, Latin America, South Asia) will further strengthen uptake.

These channels ensure that the platform grows both bottom-up (through local integrations with platforms like SERA) and top-down (through donor-led adoption across multiple geographies). This dual approach allows for rapid credibility in Bangladesh while laying the foundation for global replication.

2.7 Partnerships

Partnerships will play a decisive role in both early adoption and long-term sustainability of the Blockchain-Traceability-as-a-Service platform. They act as multipliers for reach, helping to embed the solution across value chains and ensuring alignment with the needs of exporters, governments, and financiers. Partnerships are grouped into **immediate partners** who drive adoption from the start, and **long-term partners** who will sustain and scale the solution over time.

Immediate Partners

- **Institutional and Donor Partners:** Organizations such as **UNDP Bangladesh**, development agencies, and national government ministries provide legitimacy, access to projects, and the ability to embed blockchain functionality into ongoing programs. Donors also represent a critical distribution channel, given the large number of traceability projects they fund worldwide.

- **Exporters and Processors:** Exporters are direct beneficiaries of blockchain traceability because it strengthens compliance with regulations such as EUDR and FDA traceability rules. By demanding blockchain-backed reporting from their traceability providers, exporters effectively act as **distributors** of the solution. Their influence ensures that existing e-trace platforms are incentivized — or required — to integrate with the TaaS APIs.

Long-Term Partners

- **Financial Institutions:** Banks, insurers, and trade finance providers will emerge as long-term partners once the platform is embedded in value chains. With access to verified production and transaction data, financial institutions can design better credit and insurance products, while also applying pressure on traceability providers to integrate blockchain as a standard. Over time, financiers will help normalize blockchain-backed traceability as a prerequisite for accessing affordable finance and insurance.

This two-tier partnership model ensures that adoption begins with the institutions and exporters who feel the most immediate pressure to meet compliance standards and can extend that

pressure to their technology providers. In the longer term, financial institutions will reinforce the business case by linking access to financial services with immutable traceability data, making blockchain adoption a market requirement rather than an optional feature

2.8 Launch Plan

The launch of the Blockchain-Traceability-as-a-Service platform will be staged to balance pilots, early adoption, and long-term scalability. The plan aligns with the partnership structure, beginning with **immediate partners** to establish credibility and results, and preparing for **long-term partners** who will sustain and scale the solution.

Pre-Launch (Foundation Building)

- Finalize the SaaS MVP, incorporating Winter Protocol v2 upgrades and developer-ready API documentation.

- Conduct joint design workshops with **SERA Bangladesh** and other institutional partners to align integration with existing supply-chain traceability workflows.

Launch (Immediate Partner Integration)

- Deploy the platform with **SERA Bangladesh** as the first integration, focusing on winter vegetables and fruits.

- Onboard exporters into the pilot, demonstrating how blockchain-backed traceability strengthens compliance and builds trust with buyers.

- Collect and publish pilot results via an open-dashboard as a case study to share with donors, institutional partners, and government agencies.

Post-Launch Growth (Building Momentum)

- Expand integrations to additional traceability providers in Bangladesh (e.g., fisheries, shrimp, and other commodities supported by UNDP).

- Engage **exporters** as advocates who can pressure their existing traceability providers to adopt blockchain functionality through the API layer.

- Leverage **donor and institutional networks** to replicate the model across other funded projects, particularly in regions where blockchain is already part of national digital transformation strategies.

Long-Term Scale (Financial Integration)

- Position **financial institutions** as key long-term partners, enabling banks, insurers, and trade financiers to access risk and production data through the platform.

- Demonstrate how immutable traceability records reduce credit risk, enabling financiers to offer more affordable loans and insurance products.

- Over time, link financial service eligibility to blockchain-verified traceability data, creating a strong market-driven incentive for adoption across traceability providers worldwide.

3. Market Penetration Strategy

3.1 Approach: Niche-First, Scalable Later

The market penetration strategy follows a **niche-first** approach: beginning with focused integrations in Bangladesh, proving value in real-world workflows, and then expanding regionally and globally through institutional and donor-led channels.

The first niche will be **SERA Bangladesh's winter vegetable and fruit value chains**, where the TaaS platform will demonstrate its ability to simplify blockchain integration, provide immutable compliance records, and build trust with exporters. **As mentioned above, the model is designed for scale and will be expanded after the pilot phase.**

3.2 Scaling Plan

- **Phase 1 (0–6 months): Prove & Publish**

    - Finalize TaaS MVP and core modules (API endpoints, user management, billing, compliance dashboards).

    - Pilot with **SERA Bangladesh**, onboarding winter vegetable and fruit cooperatives and exporters.

    - Document outcomes in a **case study** highlighting compliance readiness and transparency, targeting donors, UNDP, and government stakeholders.

- **Phase 2 (6–12 months): Land & Expand**

    - Extend to other traceability projects in Bangladesh, such as shrimp and fisheries.

    - Onboard additional exporters who require blockchain traceability, encouraging them to push their e-trace providers to adopt the APIs.

    - Transition **existing projects (from zenGate Global's Palmyra Pro)** already in operation over to TaaS Platform:
        - **Zambia honey supply chain** with 3,000+ farmers and 30,000 hives.
        - **Nigeria cocoa program** with up to 50,000 farmers.
    - These existing projects provide immediate scale outside Bangladesh and validate the platform across multiple commodities and geographies.

- **Phase 3 (12–24 months): Replicate & Scale**
    - Broaden adoption across UNDP projects in Africa, Latin America, and South Asia, particularly in countries where blockchain is part of national digital transformation agendas.
    - Work with donors to integrate the TaaS platform into other funded traceability programs worldwide.
    - Begin engaging **financial institutions** as long-term partners, linking immutable datasets to credit, insurance, and trade finance solutions.

3.3 Operational Readiness

To support adoption and replication, the following capabilities will be in place:

- **Training and Documentation for E-trace Providers:** Developer-focused materials, API documentation, and a sandbox environment to simplify integration.
- **Educational and Awareness Building for Exporters:** Targeted sessions to highlight how blockchain-anchored traceability strengthens compliance, improves buyer confidence, and reduces market access risks.
- **Awareness Building for Donors and Governments:** Engagement initiatives to highlight the policy, compliance, and transparency benefits of immutable datasets, ensuring alignment with national digital agendas and donor program goals.
- **Dedicated Technical Support:** Hands-on assistance for onboarding and troubleshooting during both pilot and expansion phases.
- **API Compatibility:** Design optimized for cloud-based traceability systems, ensuring integration without disrupting existing workflows.

3.4 Key Performance Indicators (KPIs)

Progress will be measured through adoption (these KPIs are to be defined as the project kicks off):

- **Pilot Completion KPI:** ≥70% of SERA's priority events (harvest, QA, export batch) immutably logged on-chain over a continuous 60-day window.
- ≥2 exporters produce blockchain-backed compliance reports accepted by buyers.
- Mean integration time for an e-trace provider ≤4 weeks from sandbox to production.
- 1 donor-funded replication commitment.
- [Long Term] 1 financial-institution sandbox pilot exploring risk products
- [Long Term] Geographic reach (Bangladesh plus replication in Zambia, Nigeria, and additional UNDP projects).

4. Branding & User Acquisition

4.1 Core Message / Identity

"Simple, scalable traceability APIs that bring trust, compliance, and financial inclusion to supply chains — powered by blockchain."

The identity emphasizes accessibility for e-trace providers, credibility for exporters, and confidence for donors and governments. The goal is to position the platform as the *preferred blockchain layer* for global traceability systems.

4.2 Tone of Voice

- **For E-trace Providers:** Practical, technical, and solution-oriented — demonstrating how the API reduces complexity and accelerates adoption.
- **For Exporters:** Compliance-driven and benefits-focused — highlighting risk reduction, regulatory alignment, and stronger buyer confidence.
- **For Donors and Governments:** Transparent and accountable — showcasing how immutable data improves oversight, governance, and long-term sustainability.

4.3 Acquisition Channels

User acquisition will focus on demonstrating value in real-world pilots and leveraging institutional networks for scale:

- **Pilot Demonstrations:** Showcasing integration results with SERA Bangladesh as the flagship pilot.
- **Institutional Communications:** Leveraging UNDP channels (reports, events, newsletters) and donor platforms to highlight results.
- **Exporter Engagement:** Awareness-building initiatives to show how blockchain-backed traceability improves compliance and market access.
- **Donor and Government Outreach:** Targeted briefings and workshops to emphasize the benefits of immutable data for transparency and accountability.
- **Impact Storytelling:** Publishing case studies and real-world examples (e.g., Bangladesh pilot, Zambia honey, Nigeria cocoa) to reinforce credibility and highlight the path to scalability.

5. Individual Project Roadmap (Post-Accelerator Sustainability)

5.1 MVP Scope

The first phase is to design and deploy a blockchain-enabled Traceability-as-a-Service (TaaS) platform that provides a subscription-based API service layer for digital traceability and e-trace solutions. Modeled on Winter Protocol APIs developed during the UNDP SDG Accelerator, this will be extended into a scalable, multi-tenant SaaS offering.

A **Minimum Viable Product (MVP)** will be delivered that integrates with SERA Bangladesh's platform, supporting winter vegetable farmers, cooperatives, and exporters. The MVP will provide a foundation for replication across additional value chains and UNDP country offices.

The core value of the MVP is to **abstract blockchain complexity** (wallet management, transaction building, and execution) into a simple, developer-friendly API, enabling rapid adoption without the need for deep blockchain expertise.

5.2 Core Development Activities

The MVP build will consist of both blockchain upgrades and SaaS platform modules:

- **API Service Development**
    - Smart Contract Upgrades: Extend Winter Protocol contracts (multi-chain: Cardano + EVM).
    - Core API Endpoints: Submission, event processing, and verification (location/time/device verification).
    - Notification & Event Processing: Job queues, webhooks, and failure tracking.
    - Output Builders & Explorers: Transform on-chain data into user-friendly, verifiable formats.
- **Core Platform Modules**
    - User Management & Authentication: Role-based access, login, 2FA, invite flows.
    - API Key Management: Key generation, revocation, and usage tracking.
    - Pricing & Billing System: Credit card integration, usage metering, spending alerts, invoicing.
    - Developer Experience: Documentation hub (Swagger, guides, FAQs), API dashboards, testnet/mainnet toggles.
    - Admin & Compliance Tools: Admin console for oversight, analytics, and monitoring.

5.3 Pilot with SERA Bangladesh

The pilot phase will test the TaaS platform in live workflows with **SERA Bangladesh's winter vegetable value chains**. Activities include:

- Training & Capacity Building: Structured sessions for SERA's technical team and cooperative leaders.
- Consultations: Joint design workshops to align API workflows with existing traceability processes.

- Implementation Support: Covering costs of initial testing, integration, and iteration.

- Feedback & Evaluation: Collecting structured feedback on usability, scalability, and value to inform improvements.

5.4 Expansion Strategy

Once the pilot is validated, the roadmap transitions to scaling across other projects and geographies:

- **Bangladesh:** Expand to other UNDP Bangladesh target projects such as shrimp and fisheries.

- **Existing Projects:** Transition current deployments for **Palmyra Pro (powered by zenGate Global)**, including the Zambia honey program (3,000+ farmers, 30,000 hives) and Nigeria cocoa program (up to 50,000 farmers).

- **Future Capabilities:**

    - Integrate with IoT devices (sensors, weather stations, quality monitors).

    - Link with national-level digital identity (DID) systems for secure credentialing.

    - Enable secure data-sharing with customs agencies to streamline exports.

- **Global Scale:** Replicate across other UNDP offices and donor-funded programs worldwide, embedding blockchain as part of digital transformation strategies.

6. Pricing & Sustainability Considerations

The Blockchain-Traceability-as-a-Service (TaaS) platform will operate on a **SaaS-based pricing model** designed to balance accessibility for smaller e-trace providers with long-term financial sustainability. The model is deliberately simple and transparent:

- **Base Subscription Fee**

    - Covers fixed costs such as platform maintenance, documentation, compliance tools, and customer support.

    - Ensures that even during off-peak or non-harvest seasons, providers retain access to core features like user management, dashboards, and reporting.

- **Usage Credits (Variable Component)**
    - Billed according to actual on-chain usage, measured in credits linked to data submission and storage events.
    - Enables cost predictability while ensuring fairness: smaller platforms pay less, while larger users scale affordably.
    - Credits can be purchased upfront or on a rolling basis, with alerts and reporting to prevent overspend.
- **Volume Discounts and Donor Onboarding Support**
    - Larger providers and exporters receive tiered discounts as transaction volumes scale.
    - Donor-funded credits can subsidize onboarding for early-stage pilots or cooperatives, lowering barriers for first-time adoption.

This **base + usage credits** approach ensures the platform is financially sustainable while remaining inclusive for diverse partners — from smallholder-focused traceability projects to large-scale export systems. Over time, this model creates the foundation for reinvestment into platform improvements and global replication.