21-25 February 2022
OECD Forum on Due Diligence in the Garment & Footwear Sector
Side sessions
We will start shortly.
Side event - Untapping the potential of blockchain for responsible and inclusive business models in the garment and footwear sector

Moderator

Elisabeth Tuerk
Director, Economic Cooperation and Trade Division, UNECE

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Ingrid Zabaleta
Regional Executive Assistant +Cotton Project, South-South Cooperation, FAO RLC Office

Giorgio Ravasio
Country Manager, Vivienne Westwood, Italy

Benjamin Fuchs
Chairman, WEBA Weberei Appenzell AG

Gediminas Mikutis
Co-Founder and Chief Technology Officer, Haelixa

Cedric Brunner
Head of Stakeholder and Innovation Management, OEKO-TEX

Speakers

OECD Forum on Due Diligence in the Garment and Footwear Sector
Side event Untapping the potential of blockchain for responsible and inclusive business models in the garment and footwear sector
February 22, 2022 | 2:00 PM - 3:15 PM
Highlights and key findings - UNECE Blockchain Pilots (draft) Proof-of-Concept

**Highlights**

- **+60 partners** covering the full spectrum of value chains
- Across **18 countries** from developed, transitioning and emerging economies
- Blockchain has the potential to:
  - Increase **trust** in sustainability claims for products and materials
  - Enhance **B2B and B2C communication**
  - Improve **access to reliable information** on compliance with policy and regulatory requirements

**Key Findings and Recommendations**

**Policy makers**
- Create the necessary **ecosystem**
- Open & inclusive solutions
- Capacity-building/tech-transfer for SMEs
- Rules on data privacy and security

**Industry actors**
- Commit and collaborate with all stakeholders in the value chain
- Targeted investments in digital technology (blockchain, DNA markers)

**CSOs/Standard-setting bodies**
- Ecosystem integration
- **Verification**, monitoring and validation mechanisms

**Technology service providers**
- Ensure interoperability with data management systems & other evolving technologies (blockchain/ AI/ IoT/ etc.)
Proof of Concept – Harnessing the potential of blockchain technology for due diligence and sustainability in cotton and leather value chains

Contents

Background
Scope and goals
Preparation – How to build a use case?
The technology
Deep dive into the use cases
Experiences from the industry
Recommendations and possible evolutions
Conclusion
Annex

Upcoming industry experts and peer consultations

Proof-of-Concept Report
Harnessing the potential of blockchain technology for due diligence and sustainability in cotton value chains

Summary:
Improving traceability and transparency in the garment and footwear sector have become a priority for consumers, governments and the industry due to the environmental, labor and social impacts resulting from decades of unsustainable consumption and production practices to comply with fragmented value chains. The cotton sector in particular stands major sustainability impacts underpinned by water pollutants, workers' exposure to hazardous substances, forced and child labor. This problem has been recognized by governments, international organizations, and the industry, and is part of the United Nations' Sustainable Development Goals (SDGs).

Starting in January 2020, and over a period of 12 months, the United Nations Economic Commission for Europe (UNECE) implemented a pilot project for a blockchain platform to enable value chains in the cotton sector to support enterprises in their efforts to comply with relevant norms and standards for sustainability and environmental excellence. In line with the Sustainability Development Goals (SDGs) for responsible consumption and production of the United Nations' 2030 Agenda, the pilot aimed to the full spectrum of value chains spanning from cotton cultivation to retailing and including textile manufacturing, spinning, weaving, knitting, finishing, manufacturing, logistics and sales. The project focused on developing a blockchain system and on the governance of the pilots to ensure that the project's findings and results are useful for the wider cotton sector's traceability and transparency.

The project concluded that the UN/CEFACT (United Nations Commission on International Trade Law) model (UN/CEFACT Model) provides a valuable blueprint for blockchain systems with the potential to be scalable and flexible, while supporting regulatory frameworks and industry standards, and reducing transaction costs and increasing trust in the system. The project also identified that additional work is needed to develop a governance framework and to ensure the scalability and flexibility of the system.

This proof-of-concept report provides the key findings from the pilot that involved representatives of the global cotton industry, to better understand the role of blockchain technology and transparency, to improve traceability and sustainability in a blockchain system with use of CSV markers, to implement a blockchain-enabled rulebook and high-value chain. The report also provides key recommendations regarding key challenges and opportunities for scalability in other textile fibers and materials.

The work is supported by the project of the UNECE United Nations Oecd in Trade Facilitation and Electronic Business (UNITAP) initiative. Enhancing traceability and transparency of sustainable products in the garment and footwear sector is jointly implemented with the International Trade Centre (ITC) with funding from the European Union since 2019, and is based on The Sustainability Pledge.
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Ingrid Zabaleta
Regional Executive Assistant +Cotton Project, South-South Cooperation, FAO RLC Office
TRAZABILITY BLOCKCHAIN PILOT IN PERÚ: +COTTON FOR A SUSTAINABLE FAMILY FARMING AND TEXTILE INDUSTRY

THE +COTTON PROJECT

FAO

Brazilian Cooperation

Partner Countries

LAC Regional Office
FAQs
Representations

ABC/MRE
IBA
Brazilian Technical
Institutions

7 Countries
100 public and
private institutions net

80% cotton farmers are family farmers (Paraguay, Perú, Colombia, Ecuador, Bolivia y Argentina)

Validated in 5 countries the sustainable production model

TRILATERAL SOUTH-SOUTH COOPERATION
SOCIAL, POLITICAL AND ECONOMICAL INCLUSIÓN APPROACH
**BLOCKCHAIN PILOT: PARTNERS IN VALUE CHAIN**

**COSTACH COOPERATIVE**
Farmer’s cotton cooperative

- **Production:** 5,200 Family farmers
- **Location:** Region of Piura.

**+COTTON PROJECT**
Articulator of the Blockchain initiative in Peru and LAC Region:

- FAO + ABC/MRE + Countries
- Universe of 10,000 farmers.
- **UNECE** partner in LAC

**CREDITEX**
Textile Industry Company

- Main supplier of extra-long fiber yarns to Peruvian apparel manufacturers
- International clients
- **Production:** 6,708,329 kg. of yarn.

**PIJAMA RETAILER**
Luxury Brand of pajamas

- **100% cotton Pima and Pima Knit**
1. **First Initiative of cotton Blockchain technology in LAC Region**: Trazability from fiber to garment.

2. **Adding Value/Inclusive business**: Family Farming production + ESG sustainability criteria + cotton certifications.

3. **To place Peruvian cotton**: Extra long fiber, identity, quality

4. **Sustainability of the pilot**: Identification of clients and cooperation possibilities.

5. **Rural context in LAC**: Connectivity and digitalization

6. **Reliable information**: Credible data to build the trust of the consumers and scale good practices to producer's countries.
Thank you!

Ingrid Zabaleta
Regional Executive Assistance
+Cotton Project
Ingrid.zabaleta@fao.org
Side event - Untapping the potential of blockchain for responsible and inclusive business models in the garment and footwear sector
Policies and approaches to harness the potential of innovation and advanced technologies for responsible and inclusive business models in the industry. Challenges and opportunities
TEXTILE INDUSTRY IN FIGURES

- 7000+ Enterprises
- 3.0 billion dollars exports (expected in 2021)
- ~100% of cotton converted into yarn
- 400,000+ people employed

WHAT MAKES US DIFFERENT?

- Fully transparent value chain
- Right next door (between Asia and Europe)
- Duty free (GSP+, FTZ in CIS)
- Great cotton (including organic)
- State-of-the-art technologies
TOWARDS GREEN ECONOMY IN COTTON & TEXTILE SECTOR OF UZBEKISTAN

TRACEABILITY FROM THE FIELD TO THE CUSTOMERS SHELF

SUSTAINABILITY ORGANIC COTTON ALIGNED WITH BETTER COTTON INITIATIVE

CIRCULARITY PRE-AND POST- PRODUCTION WASTE UTILIZATION

COTTON TEXTILE CLUSTERS MODEL

WATER SAVINGS
COTTON TEXTILE CLUSTERS

ADMINISTRATIVE SUPPORT

FINANCING UP TO 60% OF THE COST

GINING and OIL EXTRACTION PLANTS

WATER SAVING TECHNOLOGY

HIGH YEILD

EFFICIENT MANAGEMENT SYSTEM

MODERN AGRICULTURAL MACHINERY

NEW WORKPLACES

15 PROJECTS in 2018

75 PROJECTS in 2019

122 PROJECTS in 2021

100+ thsd employees

100% of the total sown area of cotton in the republic

100% capacity utilization

1. 700+ thsd. tons

2. 362+ mln. sq. m.

3. 90+ thsd. tons

4. 270+ mln. pieces

100% capacity utilization
PERFECT TEXTILE CHAIN
«FROM COTTON FIELD TO CONSUMERS SHELF»

CIRCULARITY IN THE TEXTILE SECTOR OF UZBEKISTAN

CHALLENGES:

- INTRODUCTION OF SUSTAINABLE PRACTICES
- DIVERSIFICATION (shifting from cotton to synthetic yarn)
- DIGITALIZATION AND AUTOMATIZATION (implementing systems like ERP, SAP, SCM, EWMM, GRC and etc.)
- GLOBAL INTEGRATION (certification, standardization, brands production)
- FUNDING AND TRAINING TO MICRO AND SMALL ENTERPRISES
THANK YOU FOR YOUR ATTENTION
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Untapping the potential of blockchain for responsible and inclusive business models in the garment and footwear sector

22 February 2022 | 14:00 - 15:15 CET

THANK YOU
JOIN THE SUSTAINABILITY PLEDGE

thesustainabilitypledge.org