



Fintech Advisory Services

How Blockchain Can Disrupt Supply Chain?

Ugly Fruits, Food Waste,
Bananas.



Challenges of the Food Supply Chain

The global supply chain market is growing, 14% of Buffalo milk is produced in Italy, while 86% are being produced in Asia and later on exported to countries globally. 1.13 billion kilograms of beef were exported to Canada, Japan, Mexico, Korean, and Hong Kong.

However, not all good are reaching their final destination.

Food Safety Magazine counted 456 food safety recalls worldwide, with an average US 10 million cost of recall.

The core problems:



Globalisation and Respective Operational Costs



Adaptation to Changes



Quality Control

Blockchain is a disruptive technology for a supply chain sector and contributes a lot in costs reducing and quality increasing. Let's look at impressing results that is possible to achieve with Blockchain in food traceability.

Solutions for Food Traceability

Traceability process takes days or sometimes even weeks to get through all the bureaucracy and mix of digital and paper-based information. What it means for the end users? End users are struggling to get fresh bananas, as they all arrived not in their best condition.

Recently Hyperledger Fabric implemented a new solution for Walmart to track mangoes. It normally takes one week in the US to trace these fruits. Hyperledger helped to reduce the time from 7days to 2.2 seconds. Now 5 different suppliers are using Hyperledger's technology for 25 products traceability, including: strawberries, greens, meat, poultry, dairy products, and baby food.

Food traceability with Blockchain is something that can stop contamination-related issues and prevent such scandals like 2008 Chinese Milk Scandal that led to 300,000 victims and 54,000 babies hospitalised.

Blockchain allows to see:



Provenance



Real-time location



Production & transportation

Ugly Fruit Does Not Mean Bad

How Blockchain can help?

Have the food tracking allows people to see that the “ugly” fruits are coming from the same place, have the same agricultural conditions, and the same taste.

One of the largest grocery stores chains in France used these “ugly” items in their advertising to minimise the food waste problem related to the beauty condition of the fruits and veggies.



According to World Economic Forum, food sensing technologies together with Blockchain can reduce food waste by 9%.

Blockchain enables easy sharing, aggregating and analysing the data. Supply and demand on the market can be constantly adjusted so that more food is coming to the places where more people need it. Shipping and delivery can be also automatised and more efficient due to the higher data transparency. There will be less document-related issues, that in most cases slowing down the delivery and some products are coming to the store not in their best condition.



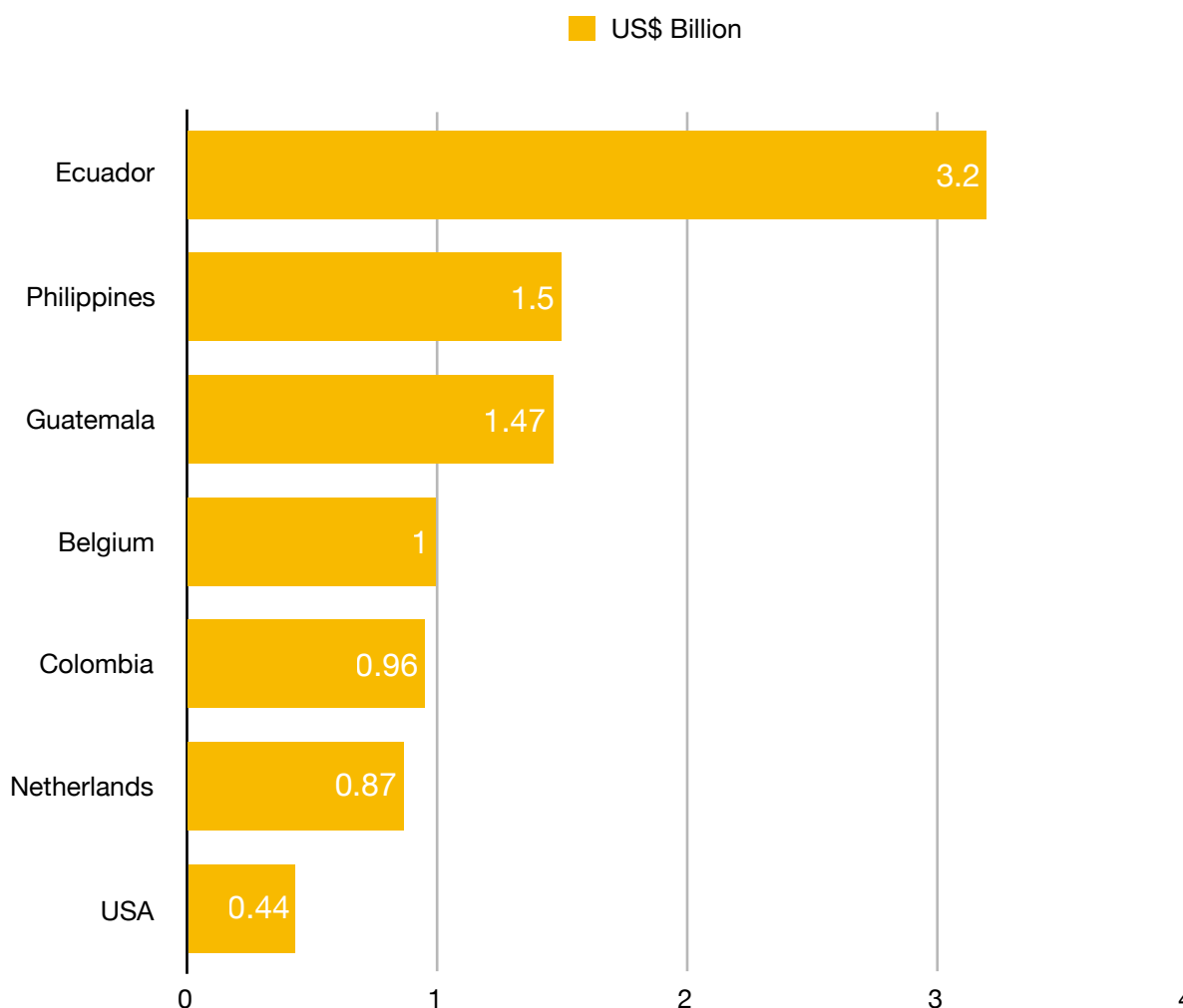
*World Economic Forum
**Organicauthority

So What about Bananas?

Bananas are the world most popular fruits

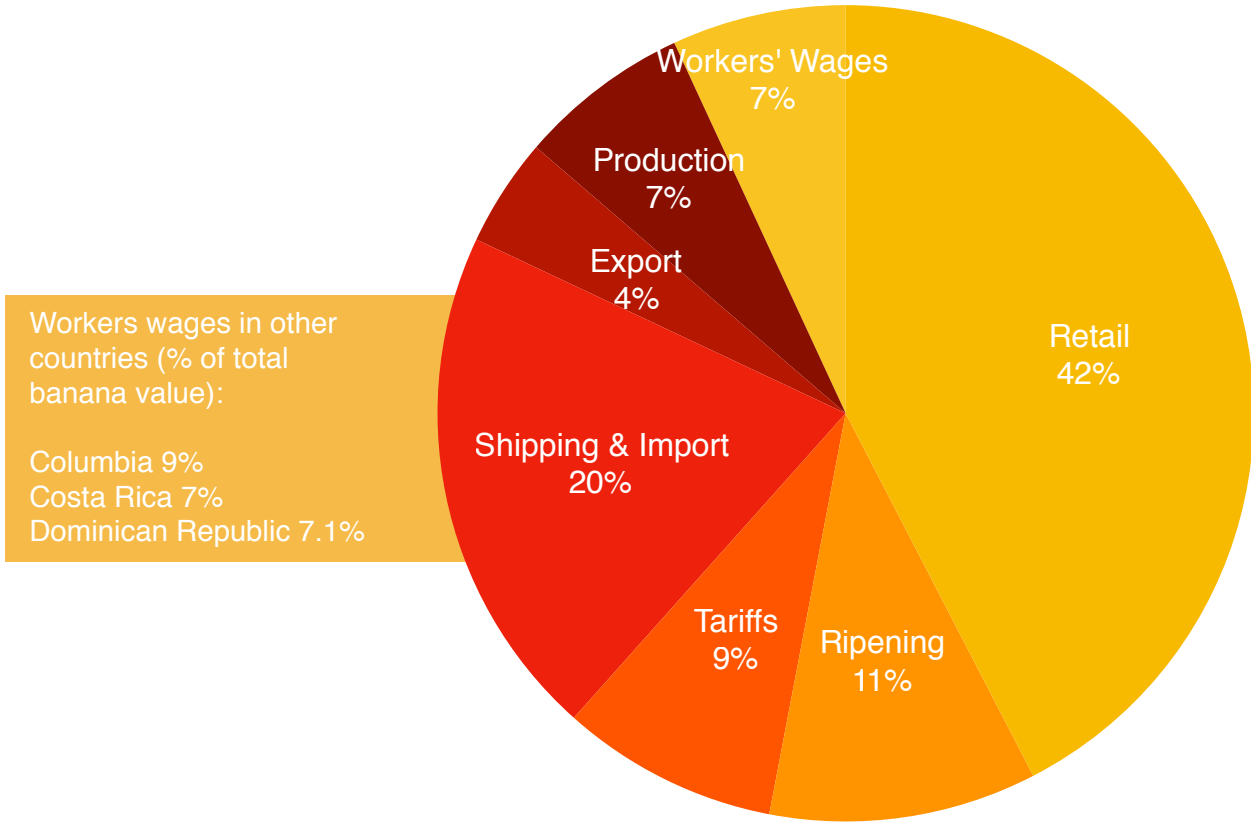


Most of bananas are coming from Ecuador, Philippines, Guatemala, and Costa Rica. In order to appear in other countries' grocery stores they are going through a long transportation, some of them are not getting safely to the end user.

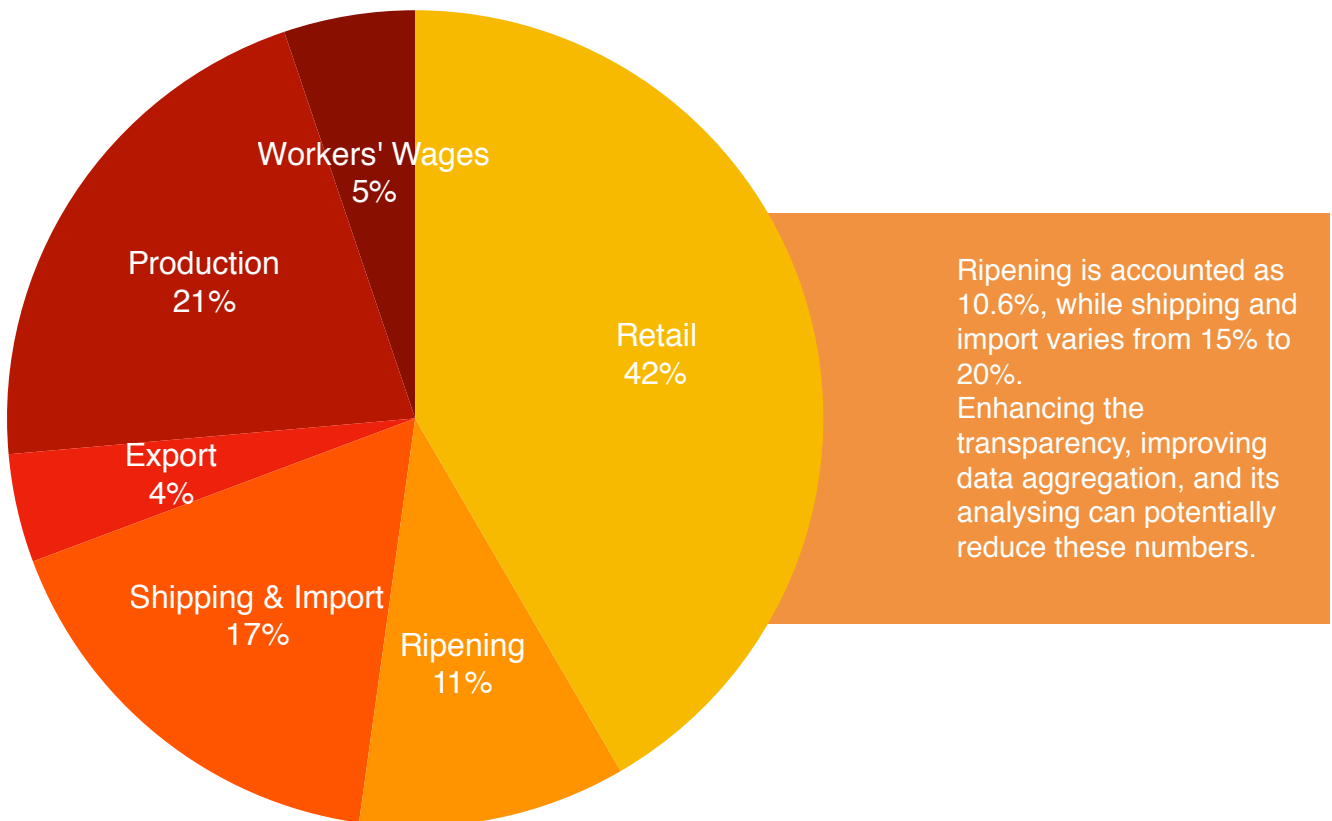


Most of bananas are coming from Ecuador, Philippines, Guatemala, and Costa Rica. In order to appear in other countries' grocery stores they are going through a long transportation, some of them are not getting safely to the end user.

Banana Value Breakdown. Ecuador



Banana Value Breakdown. Cameroon



It takes 2 to 5 days on average for bananas to get ripen.

1.4M of eatable bananas are being thrown in the UK because they are browning or have some brown spots.


After bananas left the plantation, they are getting to a special ripening rooms on the ship. This data can be placed on blockchain for each package of bananas so the ones that are expecting to start browning earlier can be sold at a discount. It will increase the grocery store revenue and reduce the food waste.



Dutch supermarket chain Plus is planning to utilise blockchain technology for their stores to track bananas. The idea behind is to show their customers the bananas journey from the plantation to the shop. Plus believes that transparency and traceability in supply chain will enable the fair trade. According to their announcement, they will be seeking the opportunity to decrease CO2 footprint in cultivation and get climate-neutral bananas. It will be a step toward better environmental solutions in food supply chain with Blockchain technology.

Banacoin is also trying to contribute in environmentally-friendly cultivation and plantation of bananas in Laos, then export them to China. They are supported by Vientiane government and following all Laos Regulations towards agricultural chemical use. They also did a token sale of their Banacoin recently.

Blockchain and Bananas



Traceability and
Transparency Increasing

Supply Chain
Improvement

Food Waste
Reduction

Cost
Optimisation

Quality
Improvement

Contact Us!

FAS was founded in Hong Kong and provides financial and business development services to companies willing to evolve in the exciting blockchain ecosystem. FAS conducts in-depth market analysis and stress-testing, builds strategic development plan, develops tokenomics and offers tokenization from scratch services. FAS also assists in new markets expansion, especially to Asian markets. FAS can rely on a strong network of professionals from different areas and expertise and connect with VCs worldwide. Believing in decentralization, we apply this ideal to our business strategy by having consultants available at any time all over the world. Thinking out of the blocks is our motto.

Elena Obukhova
CEO & Founder

Sergey Ivanov
Co-founder

Additional Contributor:
Mariia Kovalchuk

