



AGRICULTURAL INNOVATION FOR FAMILY FARMERS

RESTORING THE BALANCE IN THE COFFEE CHAIN



What is the innovation?

Blockchain is a technology that connects all stakeholders in a supply chain, from farmer to consumer, ensuring full transparency and access for everyone to the same information.

Why is it innovative?

Applied to the coffee supply chain, it can improve the fairness within the value chain without raising prices, by redistribution of value.

How does it work?

By making the value addition of each step in the coffee supply chain transparent, the industry, as well as consumers, become aware of the unfair sharing of value in the coffee chain. Blockchain technology makes it possible to share value among the stakeholders (sharing by design), and to improve the fairness within

the coffee value chain without raising prices. Blockchain can provide verifiable proof of impact. The next step is to create inclusive business models.

Where?

The innovation is being carried out in Ethiopia and its coffee supply chain.

Who are the beneficiaries?

The beneficiaries of this innovation are coffee growers in Ethiopia, along with other actors of the coffee value chain.

What are the results?

Using blockchain in the coffee supply chain as well as in other crops is a novel concept and it will disrupt the supply chain in the near future. By laying out the process for all actors to see, the value can be shared fairly amongst all.

So far, a Dutch coffee company contracted 400 smallholder farmers who participate in the FairChain farmer training programme in the Limu region in Ethiopia. Today, 45 percent of the

value of every cup of its coffee stays in Ethiopia, which is 4 times that of multinationals. This company is roasting and packing its FairChain coffee in Ethiopia and has recently started processing in Kenya as well. The goal is to reach an equal split in the value: 50 percent for producing and 50 percent for the consuming country.

Introducing tokenization, connecting consumers and farmers on a blockchain, will create loyalty, resulting in more money spent within the value-chain, leading to positive externalities in coffee producing countries.



SDGs the innovation contributes to: SDGs 1, 10 & 13

Looking to the future:

The potential for blockchain to increase efficiency, transparency and trust throughout agricultural supply chains and empower all market players is real. The technology has the potential to simplify and integrate agricultural supply chains, enhance food safety, reduce risk in trade finance and promote inclusive trade, increase access to agricultural financial services, generate smarter market information and provide greater legal certainty to land-tenure systems. Connecting IT-solutions to the application will further enhance the scope of opportunities as well as the efficiency and reliability of collecting and reporting data and KPIs.

As these technologies continue to develop, the international community has an important role to play in contributing to the creation of an enabling environment that ensures that the productivity gains generated from these technologies can be shared by all market participants, including smallholder farmers, processors as well as micro-, small- and medium-sized enterprises. The technology has huge potential to address many of the challenges that disadvantaged market players face by allowing them to participate in integrated supply chains, in addition to improving rural development interventions and being an impetus to achieve the Sustainable Development Goals.

Related links:

- <http://www.fao.org/3/CA2906EN/ca2906en.pdf>
- <http://www.fao.org/3/ca1335en/CA1335EN.pdf>