



# BLOCKCHAIN FOR VALUE CHAINS (BC4VC)

A readiness assessment to ensure  
inclusiveness of Blockchain  
technology



## WHAT is it about?

It is clear that there are challenges in global commodity supply chains and that many of the challenges are faced by farmers or producers at the beginning of the supply chain. There are not many inclusive supply chains with fair shares in the margin, transparency and data insights and opportunities. There is also a large distance in information between the end consumer and the people at the beginning of the chain that needs to be overcome.

Distributed Ledger Technology (DLT) and Blockchain are applied in the food industry to create trust between supply chain actors to share data about who they are both downstream and upstream, and their activities towards the product that flows in the supply chain through a series of transactions. The technology can improve supply chains by enabling faster delivery of products, enhancing product traceability, improving collaboration between supply chain partners and aiding access to finance particularly for farmers.

UNIDO has developed a methodological framework to assess the readiness of a value chain to adopt blockchain. The objective of this methodology is to both address a general approach to assessing a value chain from a data-sharing perspective, and at the same time to go into the specific requirements that come with implementing blockchain technology. With a special aim on inclusiveness of actors, this methodology can be applied to assess the feasibility and readiness to adopt blockchain for any commodity value chain from any sourcing country.



## WHY is it needed?

UNIDO supports its member states and their private sectors to unlock the new opportunities offered by the Fourth Industrial Revolution (4IR) to drive inclusive positive change by strengthening linkages between supply chain actors, increasing their access

to market and to new technologies, which can help to increase productivity and economic growth. Many times new technologies benefit mostly those with greater access and resources, leaving excluded those most needed. This methodology makes sure that the implementation of Blockchain has benefits for all actors and leaves no one behind.

Blockchain, and DLT in general, offer potential benefits to value chains by the way it connects supply chain partners and the data they agree to share. However, there are nuances specific to this technology that should be understood and considered before an organization or supply chain implements it. This includes considering to what extent the adoption of blockchain can contribute to a potentially positive impact on the environment and the people in a value chain.



## IMPACT

BC4VC allows governments and the private sector to make informed and collective decisions on adopting the right technologies for their needs and have a roadmap on what a value chain needs to improve before embarking on a Blockchain application. Therefore, it reduces risks and costs by targeting the critical areas that required support and investments.



## HOW does it work?

**BC4VC** consists of three parts that are geared to answering the following questions: 1) Scoping: Does this value chain need blockchain? 2) Scoring: Is this value chain ready for blockchain? 3) Solution: What does it take to implement blockchain?

A fact-finding mission is at the centre of the approach to collect information on the ground on the potential benefits of and the possibilities for implementing blockchain. The information gathering is done through a series of questionnaires adjusted for the different value chain actors that assess the conditions related to infrastructure, data availability, IT savviness, traceability systems, transparency, transactions and sustainability.



KNOWLEDGE  
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This tool will be available soon. Stay tuned!  
<https://hub.unido.org/>

