

PROJECT SUMMARY

Ref No.: MRIC/PCS-2304

Title: Investigating the traceability of organic produce using a decentralised application (dApp) built on the Ethereum blockchain platform

Local organisation: Regional Training Centre (Societe Omnicane, Alteo et Terra)

Project Leader	
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TECHNICAL ABSTRACT

Due to the increasing demand for organic produce in Mauritius and the risks of fraud in this currently small market, it has become paramount to develop a relaible system to trace and authenticate organic produce from the producer to the consumers. This feasibility study aims at investigating the potential of a decentralised application (dApp) built on the Ethereum blockchain platform to increase transparency and efficiency of two types of supply chains: organic and sustainable. To build trust and transparency in these supply chains, a dApp allows the creation of a digital record of the production process to the consumers through the distributors and retailers using blockchain technology. This record will include information such as the origin of the produce, production practices used, certifications obtained, transportation and storage conditions, quantity and price sold to consumers. Consumers can access the record by scanning a QR code on the product label and see the entire journey of the produce. This solution aims to ensure secure and transparent record keeping while providing consumers with information about the produce they purchase.

Key Words: Organic certification, blockchain, decentralised network, traceability, provenance, supply chain