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A STUDY OF BLOCKCHAIN BASED PORTAL FOR FARMERS: EXPLORING A BLOCKCHAIN-BASED PORTAL FOR AGRICULTURAL ADVANCEMENT

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ABSTRACT-Blockchain is like a super-secure digital ledger that records transactions across multiple computers in a way that makes it nearly impossible to alter or tamper with the data once it's been added. Think of it as a chain of blocks, where each block contains a batch of transactions, and these blocks are linked together in a chronological and encrypted manner, forming a continuous chain. This decentralized and transparent system ensures trust and reliability without the need for intermediaries like banks or governments. Blockchain technology functions as an exceptionally secure digital ledger, recording transactions across numerous computers in a manner that greatly minimizes the risk of alteration or tampering. Conceptually, it operates akin to a series of blocks, with each block encapsulating a group of transactions. These blocks are then linked together sequentially in a manner that is both chronological and encrypted, forming an unbroken chain of data. This decentralized and transparent system fosters trust and reliability, bypassing the need for intermediaries such as banks or governments. This document underscores the integration of blockchain technology within a farmer's platform, facilitating the secure storage of transactional data pertaining to crop sales and purchases. The integration of blockchain technology within a farmer's platform highlights its utility in securely storing transactional data related to crop sales and purchases. By leveraging blockchain, the platform ensures the integrity and authenticity of these transactions, enhancing transparency and efficiency in agricultural trade.

Keywords: *Blockchain, Digital Ledger, Transcations, Multiple computers, Alteration, Tampering, Chain of blocks, Chronological, Encrypted, Decentralized, Transparent, Trust, Reliability, Famer's platform, Crop Sales.*