**Transparency and Traceability in the Banana Value Chain through Blockchain Innovation**

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Banana, are a common fruit delicacy among most Sri Lankan and the fruit represent all cultural events across diverse ethnicities. A large variety of desserts and cooking-type bananas add diversity to local meals in terms of nutrition and taste. Banana is one of the main sub-sectors of the rural agricultural economy. The key concerns of the study were to map the banana value chain in order to identify the key players, functions, income distribution, and decision-making and identify the level of transparency and traceability on the Banana chain using sample size of 75 players. The final aim was to develop the blueprint of the blockchain system, which interconnects all actors in the chain digitally. Three banana-producing areas in the Polonnaruwa district and four key banana types (Ambul, Sugar, Kolikuttu, and Cavendish) were considered for the study. Structured questionnaires, in-depth interviews, and participatory observations were used to collect data from the actors of the banana value chain. Data were analyzed using both qualitative and quantitative techniques. Results revealed that conventional and peculiar actors such as input suppliers, producers, farm-gate transporters, wholesalers, processors, retailers, and consumers. Banana value chains are twofold; short regional chains and complex and lengthier export oriented chains. The current banana chain has three different distribution channels in the study areas. Production cost and margins were analyzed to determine the profit shares of the actors. Fragile and scattered regional value chains contain poor transparency system and lack of traceability significantly effect on level of transparency. In contrast, few large scale producers were used company labels and QR codes and chain wide transparency fulfill the export market requirements. Those revealed producer details, origin, claim on safety and quality standards and certification. The blueprint developed for banana block chain application for linking actors digitally and facilitates to improve transparency and authenticity.

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