Title of the Project : Implementing Core Functionalities of PDS using Hyperledger Fabric Team Members : GOKUL E (211418104066)

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**ABSTRACT**

Public Distribution System (PDS) is an essential scheme for food security introduced by Indian Government under the Ministry of Consumer Affairs, Food and Public Distribution. Main purpose of the system is to make sure that edible and non-edible supplies reach to marginalized section of Indian society at subsidized cost. However, PDS is vulnerable to leakages and issues with procurement and storage. Indian Government spends more than Rs. 750 billion for PDS and there are more than 5 lakh Fair Price Shops in India. Computerization for PDS functionalities and AADHAR Biometrics verification is carried out in many states of India. It is found out that leakages have been mitigated as much as possible. But there are many challenges still unnoticed in PDS like opaque tender procurements, diversion of standard edible and non-edible supplies, negligent wastage accountability and corrupt book adjustments in warehouses. These transparency and accountability related challenges of PDS could be met with distributed immutable ledger framework like Hyperledger Fabric. Asset tracking aids in tamper detection, wastage avoidance and logistics optimization. Proof of Concept on functionalities of PDS using Fabric would imply that blockchain could be adopted in various food supply chains and logistics.