**Supply Chain Management of Organic Supplies using Blockchain**

*“The Future of India lies in its villages”*

*~M.K.Gandhi*

Villages are the backbone of the Indian economy. About 75% of India lives in rural areas,which means that out of the 121 crore Indians,83.3 crore are from the villages of India. As per latest reports,there are about 5,97,464 villages across India which is a huge number.”Culture” and “Agriculture” are the two main factors that differentiate India from the rest of the world.More than half of India draws its income from Agriculture and Agriculture in turn contributes to about 17-18% of the country’s GDP.This project is our little initiative towards promoting the income of our villages and thereby contributing to the nation’s progress.

Goods and services produced in India’s villages go through a long process which involves storage of finished goods,transportation from rural to the urban areas and distribution of the goods to the customers.This is often referred to as the “Supply Chain”. Basically,a supply chain includes several participants like the Product/Service Producers,Distributors,Retailers and Customers. In addition it may also include several other participants like stakeholders,manufacturers,supervisors etc.,Efficient management of this supply chain is very important in order to keep the business on the go.Supply chains make or break a business.Our strategy to increase the income of the village, here is to integrate several participants of the supply chain together. We hold participants of the chain like wholesalers and retailers as intruders. Our view of these intruders is that they take away a portion of the farmers income. What if we could sell directly from farms to the customers? This will indeed,cut out on profits of the retailer,wholesaler and so on,thereby increase the farmer’s profit and also cut down on the heavy rates imposed on the customer, simultaneously allowing organic products in the hands of consumers.

Our project is going to be based on collection of data from agricultural villages of India, analysing this data and selecting centres to which these villages can supply products.The next step is to integrate participants,the supplier itself is going to act as the retailer and is going to supply products via an internet portal that is very much user friendly and simple to use.The customer on the other hand is sent notification of this product that has been harvested from the farms near his city. He places the order with the quantity he wants to buy.The supplier who is the farmer in this case collects such orders and transports goods to the city nearby.Transportation costs are added up as delivery charges to the customer waiting at the other end. In this way, the farmer supplies his fresh farm harvest to the customers of his choice and reaps his own benefits.The customer is also quite satisfied as he has bought fresh organic straight from farm goods.

Where does blockchain come into play?

BlockChain is an emerging technology that promises increased efficiencies of agricultural supply chains. It provides enhanced and secure data management,lower transaction costs,improved logistics and best traceability of products. The Storage of details of lands of farmers is a revenue detail which is generally stored by the revenue department and needs a secure storage. Thus, Blockchain is an essential technology for storing such details because it allows only updation of records and not modification. There is a wide spread of a variety of diseases nowadays. One of the reasons would be inorganic food intake. In the busy lifestyle, people want everything to be available readily in their hands. So, they consume food which is not healthy and easily available in their door steps. This project would revolutionize the economy of villages simultaneously providing healthier food for consumers at their door steps. It would also promote a better lifestyle for farmers by increasing their income.