ABSTRACT

India is an agriculture-based country. Around two-third of its population depends on agriculture directly or indirectly. Approximately agriculture contributes around 17% of GDP. This has been in the decline since 1951 due to various factors such as deficient rains, lack of interest among youths etc. This leads in reduction of agricultural production there by giving importance of effectively storing and effectively managing the agricultural produce. There is huge need for preservation, protection, storage distribution and consumption at a later stage. In India food grains are still stored in warehouse using traditional methods which leads to problems such as theft, rain, flood, variation in temperature and humidity, attacks of rodents and insects, adulteration. Government of India distributes food grains to poor people at fair price through ration cards issued to Below Poverty Line (BPL) and Above Poverty Line (APL). The existing food distribution system has various problems such as malpractices by FPS dealers such as diverting the food allocated for BPL people to open market at a higher price and distributing contaminated/adulterated ration to BPL card holders.

The intent of this project proposal is to address and try to minimize the food adulteration and contamination of the ration distributed to BPL card holders by deploying smart sensing devices with Internet of Things (IoT) to preserve the quality and quantity of food grains stored at warehouse and packaging with appropriate quantity for each package and commodity. The BPL card holders will be advised to open the sealed package after the ration card is validated.