CHAPTER 1

INTRODUCTION

A ration card is the card issued by government to allow the holder to obtain food and commodities that are in short supply during every month or in other emergency situations. Ration cards have been an important part of Public Distribution System (PDS) in India. On the basis of their economic condition, people can buy goods like food grains, sugar and kerosene with the help of their ration cards. So we are developing this project named "MONTHLY GROCERY DISTRIBUTION SYSTEM BASED ON MEMBERS COUNT USING GSM AND RFID AS UNIQUE ID-CARD" to curb the illegal activities of the corrupt officials in the food department and stop black marketing of essential goods which is supplied to the poor, and help in needy.

This project presents the construction and design of RFID based monthly grocery system design on RENESAS R5F100LE. RFID reader is used to read RFID tag and it gives the signal to microcontroller. The microcontroller compares the RFID tag; if it matches then the grains and kerosene are dispensed to the customer. If any misuse of grains, kerosene the alert SMS is sent to the concerned department.

Radio frequency identification (RFID) is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. The technology requires some extent of cooperation of an RFID reader and RFID tag. An RFID tag is an object that can be applied to or incorporated into a product, animal, or person for the purpose of identification and tracking using radio waves. Some tags can be read from several meters away and beyond the line of sight of the reader.

A ration card is a document issued under an order or authority of the state government, as per the public distribution system for the purchase of essential commodities from fair price shops. State Government issues distinctive ration cards to Above Poverty Line, Below Poverty Line and conduct periodical review and checking of Rations cards.

A Ration Card is very useful document for Indian citizens. It helps to save money by aiding in the procurement of essential commodities at subsidized rate. It has also become an important tool of identification now-a-day. You may need to produce a copy of your ration card as the proof of identification when applying for other documents like Domicile Certificate, for inclusion of your name in the Electoral Rolls, etc. Families living below the poverty line are entitled to Blue Card, under which they can avail special subsidies. In additional to permanent Ration Card, states also issue temporary Ration Cards, which are valid for a specified number of months, and are issued for relief purposes.

1.1 PROBLEM STATEMENT

Many researches were carried out regarding same project, to provide "MONTHLY GROCERY DISTRIBUTION SYSTEM BASED ON MEMBERS COUNT USING GSM AND RFID AS UNIQUE ID-CARD". The existing conventional ration card system has numerous problems. The most of the people having a ration card to buy the materials from the ration shops. To get the material from the ratio shop, first customers need to submit the ration card and has to put the sign in the ratio card depending on the materials. Then they will issue the materials through weighting system with help of human. But in this system having two drawbacks, first one is weight of material may be inaccurate due to human mistakes and secondly, if not buy the materials at the end of the month, they will sale to others without any intimation to the government and customers.

The Radio Frequency Identification (RFID) based ubiquitous technology has received a great deal of press in recent years, the major driving force behind commercial deployment of RFID technology in presently logistics and supply chain application. Since first business application emerged, several major retail chains, including Mart, Target, and Albertsons, have mandated that all suppliers introduce RFID. Aside from supply chain applications RFID technology is found in proximity cards, car security devices, pet tracking, and other specialized application.